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ORIGINAL LECTURES.

CLINICAL LECTURE

AT

King's College Hospital.

By ROBERT B. TODD, M.D., F.R.S.,
Physician to the Hospital.

CASE OF HYDATID OF THE RIGHT LUNG, WITH RECOVERY AFTER EXPULSION OF THE HYDATID.(a)

Case.—Symptoms of Bronchitis and Emphysema.—Physical Signs.—Suspicion of Tubercular Disease.—Treatment.—Expectoration of Hydatids.—Physical Signs as the Hydatids passed through the Lung.—*Rationale* of these Signs.—Source of the Hydatids(?) in the Liver not in the Lung.—Liver the Favourite Habitat of these Entozoa.—Expectoration of Bile.—Diagnosis of Hydatids.—Relative Frequency of their Occurrence in Various Parts of the Body.—Do they enter the Hepatic Ducts?—Echinococci.—Prognosis in a Case of this Kind.—Result of the Case.—Treatment.

Gentlemen,—We have all lately watched with great interest the case of a man for many weeks, who had been an inmate of this hospital, until a very short time ago. I allude to the case of James Gardiner, (Vol. XXXII., p. 27) aged 34, who, as you know, expectorated a considerable quantity of hydatids while he was in the hospital, and who, as I have reason to believe, got completely rid of them before he left.

I have previously directed your attention to this case as one of chronic bronchitis and emphysema,—that diagnosis having been quite correct as far as the actual existence of those conditions is concerned; but we had not then ascertained the causes which had given rise to these states.(b)

You will remember that I then stated to you that the emphysema was due to the long persistence of the chronic bronchitis; and that this latter condition might be kept up by a constitutional state, or by local irritation, as from the presence of tubercles, which at one time we greatly feared might have been present in this patient. I told you, also, that the emphysema was but slight, and that the lung might be restored to its normal state if the local cause of the bronchial irritation were removed.

Let me now recall to your minds the prominent points of the case. This man was admitted into the hospital on October 22nd, 1850. The symptoms at that time were as follow:—short breathing, cough coming on in violent paroxysms, which frequently lasted a considerable time, emaciation, and night sweats. Percussion was generally pretty clear, except under the right clavicle, where there was slight dulness. At this latter point, too, there was increased vocal resonance. The chest was dilated and somewhat barrel-shaped. Rhonchus, and sibilus, and crepitation were audible at various parts of the chest, and prolonged expiration was pretty generally present, especially on the right side. It was plain that there was either some dilatation of the right side of the heart, or some displacement of the whole of that organ, or perhaps both, for the heart's beats were to be heard and felt most plainly midway between the mamma and ensiform cartilage. These signs denoted that a slight degree of emphysema had already begun to be developed in both lungs, in consequence of the long continuance of the bronchitis.

After the man had been in the hospital some time, we observed a greater difference in the resonance of the two sides of the chest, and the physical signs became more marked in the right lung, especially at its apex, where crepitation existed. The patient got thin, and the night-sweats increased. All these symptoms led many to regard the case as one of phthisis, and I had myself great apprehensions of the existence of tubercular disease, which had advanced further on the right side than on the left. Various means were tried to alleviate the symptoms; expectorants, sedatives, opiates, and counter-irritants were tried, with only temporary advantage. Among other remedies, I was induced, by the spasmodic character of the cough, to try the inhalation of chloroform along with the steam of boiling water. This seemed to alleviate the violence of the cough for a couple of days, but we soon gave it up; and I also gave emetics, which acted freely; and I cannot help thinking that, although at the time but little benefit was derived from them, yet they were instrumental in bringing about some important changes, which were soon after manifest.

Our patient had been a month an inmate of the hospital, exhibiting the symptoms and undergoing the treatment which I have described. No improvement had taken place in his condition; on the contrary, he was much reduced by profuse sweats, and exhausted by violent and incessant cough.

At length, on the 22nd of November, he began to expectorate pieces of membrane, which were evidently portions of a hydatid or hydatids, and he continued to spit them up in enormous quantities for two or three days.

On the 27th, while at breakfast, he expectorated profusely. The matter brought up consisted of puriform fluid, blood, mucus, and pieces of hydatid, and was excessively fetid.

The expectoration was effected with considerable effort; the patient said that he could feel the matter traversing his right lung from the region of the liver upwards.

From the time he began to expectorate the hydatids, he complained very much of a fulness and uneasiness in the right hypochondriac region. We had already some time before noticed a fulness in this region; but the observation of this particular sign was not followed up, which I much regret, as it might have led to a surmise of the real state of the case. However, as soon as the hydatids began to pass, this region became extremely tender to the touch, and at first much swollen; and, as the expectoration went on, and especially after the very copious discharge of the 27th, the swelling visibly declined, and the tenderness on pressure diminished very much.

Simultaneously with the discharge of the hydatids, there likewise took place a remarkable change in the physical signs. On the right sight of the chest from the axilla downwards there was a marked dulness on percussion, where before the sound was clear and almost tympanitic. There was increased dulness on percussion beneath the right clavicle. In the scapular region of the right side there was likewise marked dulness on percussion. The right mammary region, however, was almost tympanitic.

As we had examined this patient almost from day to day, we had the most conclusive evidence, that these physical signs, so different from those which we had previously observed, had come on simultaneously with the expectoration of hydatids. The dulness in the lateral region of the chest on the right side was as great as might have been produced by fluid in the pleura. However, on applying my hand there I found the vocal fremitus as distinct, if not more so than in health. This, you know, is conclusive evidence against the existence of a pleuritic effusion: were fluid interposed between the lung and the pleura, the vibrations of the voice propagated to the lung from the larynx would have been reflected at this new medium of liquid, and not conducted to the wall of the chest. Over this dull region, we could likewise hear bronchial breathing, and a modified bronchophony resembling in some degree œgophony. Under the clavicle and in the scapular region the breathing was

(a) This lecture forms the 28th of a series, of which the former were published in the *London Medical Gazette*.

(b) Vide Lecture xxvi., *London Medical Gazette*, Vol. xlviii., 1851, p. 873.

vesicular, but accompanied by crepitation, and prolonged somewhat tubular expiration. In the tympanitic mammary region, the breathing was vesicular, loud, and puerile, differing only from the normal in its loudness, and in prolongation of the expiratory sound. While these signs were observed on the right side, we found that percussion over the left yielded a clear sound everywhere, and that the breathing was puerile at all parts of the lung, with prolonged expiration.

Now, the physical signs obtained at the right side of the chest were just such as one might expect from the passage of a mass of soft membrane and fluid passing through the lung. I show you in this large bottle the mass of pieces of the hydatid cyst which were expectorated. These are like thin slices of hard-boiled white of egg. Imagine a great mass of such pieces rolled up and mixed with mucus and pus traversing the substance of the lung! To what compression must it not subject the parts through which it passes! Sufficient, surely, to create the bronchial breathing, the œgophonic bronchophony, and the dulness on percussion, which we have described.

The route which all this mass must have taken, as indicated by the physical signs, was this:—Assuming, for the present, that the region of the liver was the point whence the mass first proceeded, it must have penetrated the base of the lung on the outer side, and passed up through it, and got quickly into one or more of the larger bronchial tubes, at no great distance from that part of the surface of the lung, which corresponds to the lateral region of the chest. It was then ultimately discharged through the right bronchus. The pressure of this great mass on the outer part of the middle and lower lobes of the lungs must have limited very much the flow of blood into their capillaries, and hence, as well as from the retarded venous flow, would probably arise a congested state of the capillaries of the upper lobe; whence, too, the pressure of the same mass would impede the escape of secreted fluids. Thus we would explain the dulness on percussion over the upper lobe, and the crepitation and prolonged expiration in it.

It is probable, likewise, that the bronchial tube leading to the anterior part of the middle lobe of the lung was that most free from compression; for, as the man lay on his back or right side, the weight of the mass would cause the chief pressure to affect the posterior and lateral parts of the lung; and the channel through which the mass passed was doubtless nearer the posterior than the anterior part of the lung. Hence air would most readily pass into the anterior part of the middle lobe, and hence the tympanitic character of the percussion-sound over the mammary region, and the loud and puerile breathing in that part of the chest.

But now we must deal with the question, whence did these hydatids come? They could not have been formed in the lung; had this been so, we should have detected dulness on percussion, and other physical signs, at a much earlier period, and for a much longer period. From the time of his admission, this man underwent very frequent and careful examinations of the chest; but, up to the 22nd of November, we could detect none of those signs which must have been present if one or more hydatids had developed themselves in the lung.

The suddenness, then, with which the physical signs were developed, affords evidence quite conclusive, that such a mass as we have seen expectorated could not have originated in the lung. The *direction* in which those signs manifested themselves from the right hypochondrium upwards, denoted that that region was the source whence the matter came. This view accorded with the patient's own sensations, who expressed a strong conviction, that his expectoration came from the region of the liver. Moreover, he had long noticed a fulness in the hepatic region; and we had noticed it too, but had not sufficiently watched it, until the discharge of the hydatids had begun, when a fulness was observed, and a tenderness on pressure likewise, and also a dulness on percussion for nearly a hand's breadth below the margin of the chest. Now, all these points are confirmed by the fact, well ascertained, that it is in this region of the liver that hydatids are most prone to accumulate, and that that organ is their favourite *habitat*.

It seems, then, plain enough, that all this expectorated mass must have come from the liver. Here is a drawing, taken from a man who died in the hospital, which will show you how near to the thoracic cavity these hydatid cysts may come; so that you may easily conceive that, under favourable circumstances, their contents may pass through the diaphragm into the lung. The drawing shows two enormous hydatid cysts; one on the concave surface of the liver, and near its anterior thin edge; the other at its posterior thick border. This latter came in contact with the diaphragm, and might readily have discharged its contents into the lung. The other came forwards to the abdominal parietes, where it could be felt during life, and through which it might have been evacuated, had an opening been made in time.

In Gardiner's case the cyst must have been developed on the posterior surface of the liver. Inflammation probably took place in the sac, ending in suppuration; adhesion had, doubtless, already been formed between the cyst and the diaphragm. A communication must then have been established between the cavity of the cyst and the base of the right lung; the hydatids and the pus being carried into the bronchial tubes through this opening, would compress the surrounding tissue, and condense it. In this way the hydatids would reach the larger tubes, and be expectorated.

It is an interesting point of inquiry, What is it that determines the upward course which the hydatids take through healthy lungs against gravity? All the phenomena which accompany the evacuation of hydatids through the lung are of the same kind as those which take place when pus is discharged from an abscess in the liver through the lung; and, probably, the establishment of the suppurative process within the hydatid cyst is what first determined the discharge; just in the same way we sometimes find that hydatid cysts will evacuate themselves externally through the abdominal parietes, or into some neighbouring hollow viscus—suppuration having been first established, and the pus making its way to some point of the surface, either on the skin or the mucous membrane. The same laws, then, which determine the evacuation of pus in this or that direction, would influence the discharge of hydatids. The original position of the cyst is doubtless that which has most to do with causing the evacuation of the cyst at this or that point—on the surface, or into the stomach, or through the lung. When a cyst is placed near the diaphragm, and so is favourably situate for the transmission of its contents through the lung, the movements connected with vomiting must promote its evacuation in that direction, by causing forcible compression against the diaphragm; and the exhaustion of the lung by the forcible expiration which accompanies the act of vomiting, must also assist in discharging the contents, and favouring their upward passage from the lung's base towards its root.

After our patient had expectorated the enormous mass of hydatid cysts which I have shown you, he improved very much in health and in general nutrition. The violence of the cough abated, and the profuse night sweats got better, and soon left him altogether; and now we began to perceive that the expectoration, which had hitherto been void of yellow colour, became tinged with bile, and exhibited the characteristic reaction of that secretion with nitric acid. The man himself said that his expectoration tasted very bitter, and that at times the yellow bitter stuff would come up very freely, particularly if he placed himself on the side of the bed, with his head hanging over the edge, so as to favour the expectoration of the bilious matter by gravitation. By causing him to assume this position, you will remember that several times we were able to obtain a considerable quantity of bile. Here, then, was a conclusive proof that the hydatid cyst was connected with the liver, and in such a manner that, probably, one or more bile ducts communicated with its cavity, and through that with the lung.

Let me now conclude by noticing one or two points of interest in the case. And first, you may fairly ask, how happens it that we did not recognise at an early period the presence of hydatids as the cause of the bronchial irritation and emphysema under which he suffered. The reason is, because we have no definite signs to enable us to recognise the presence of hydatids, and to distinguish them from other causes of irritation. It is only by finding hydatids, or portions of them, or hooklets or other parts of echinococci in the expectoration, that we may pronounce positively on the presence of hydatids. But, had we been in possession of certain particulars which this man withheld from us on his admission, (as hospital and other patients are too apt to do,) we might have formed at that time an opinion founded on good presumptive evidence. The points in his early history which he had omitted to tell, or we had failed to

elicit, were these :—that he had enjoyed good health until six years ago, when he had an attack of ague. Two years afterwards, that is, four years ago, pain in the right hypochondrium came on, accompanied with jaundice; the pain lasted for twelve months, but the jaundice went off early. Soon afterwards he became troubled with cough, and at this time there was considerable swelling in the right hypochondrium. Two years ago, he attended at another hospital, where he had expectorated hydatids; some of the small ones he remembers to have rolled out upon the pavement, and he had great difficulty to crush them with his foot.

If we had had these points in the history, we might legitimately have inferred that hydatids were the cause of the pulmonary irritation. A case of this kind furnishes a useful lesson as to the importance of getting as full and accurate a statement of the early history of cases as possible.

I have already told you from whence these hydatids came, and the inference was in great measure drawn from the fact, that hydatids were so much more frequently met with in the liver than in any other organ. Hydatids but rarely originate in the lung; in the great majority of cases in which they are expectorated, they come through the right lung from the liver.

Rokitansky, who is the greatest maker of *post-mortem* inspections in Europe, has drawn up the following Table, to show the relative frequency of the occurrence of hydatids in various parts of the body :—

1. The liver.
2. Sub-peritoneal areolar tissue.
3. Omentum.
4. Muscles of the heart.
5. Brain.
6. Spleen, generally with one in the liver.
7. Kidneys.
8. Lungs.
9. Bones.

Thus, you observe, that the liver occupies the highest point in the scale, while the lung is at the lowest point but one.

Another point of great interest in this case is the expectoration of bile, and the freedom with which the bile could be made to flow from the liver into the bronchial tubes. It is evident, that there must have been a free communication between the bronchial tubes and one or more of the hepatic ducts. Can it be, that a favourite habitat of hydatids is in the gall ducts, and that this is so because of their communication through the common biliary duct with the intestine. Such an idea might explain the obvious preference which they have for the liver, supposing that their germs are introduced with the food, and pass into the biliary duct.

There are, however, many obvious difficulties in the way of such a view as this; one of which is, that we as yet know nothing of whence the germs of these entozoa come. Still it is certain that we often meet with hydatid cysts, into which large ducts open, and their contents are stained with bile. Many years ago, I saw, in the possession of Professor Schrœder Van der Kolk, at Utrecht, a preparation in which a small hydatid was distinctly lodged in a duct. Such small ones as that I now show you, which is not so large as a small currant, might easily pass through some of the larger ducts. I took several such as these from a cyst connected with the liver. But there is no subject more obscure than that of the origin of these entozoa; and I am afraid it will not profit us much to enter upon any speculations respecting them here.

When we meet with hydatid cysts, we should carefully examine the internal walls for echinococci, which are small entozoa, frequently found in great numbers in these situations. Many physiologists look on the cyst as merely a nidus for these creatures, which remain attached to its inner walls, and absorb their nourishment from the fluid which surrounds them. The structure of the cyst is very simple; it has frequently the appearance of white of egg, and, upon examination, is found to consist of numerous lamellæ. Sometimes small rough papilliform growths are found projecting from the internal surface; but these are also lamellated, and resemble the cyst in structure. I have sometimes thought that these might be echinococci decayed, or checked in their growth. In some there is an inner membrane of a more delicate nature lining the cyst. Imbedded in this lining membrane, or attached to it by peduncules, are found the echinococci, very well represented in the plate appended to Mr. Erasmus Wilson's paper on the subject, in the twenty-eighth volume of the "Med. Chir. Transactions." The echinococci are easily recognised,—they possess a head, neck, and body, or tail. The mouth is surrounded by a double row of spines, or hooklets, and external to these are four suctorial discs. The coronet of hooklets is an important feature because the hooklets are frequently detached, and may be found in the fluid upon microscopical examination.

There is one entozoon with which this may be confounded; it is called the cysticercus cellulosæ, and has the same suctorial discs and hooklets; but there is always a large cystiform body appended to it.

It is of great practical importance to determine the prognosis in such a case as this :—A man has expectorated hydatids :—what are the chances that he will expectorate them again? Is there any real prospect that he will ultimately get well? Upon this point I may remark, that there is nothing in the existence of hydatids in the body which is necessarily of a fatal tendency. So long as they do not press upon or injure some important organ, they do no harm. The small hydatids which I have shown you, preserved in glass cells, were taken from a tumour which lay for years in a woman's body without any bad result. When very large they will encroach upon the liver and impede the portal circulation, and cause ascites. This was the case in the patient from whom the drawing was made. In the effort to evacuate them through the lungs there is often great hemoptysis; vessels are torn by the mass which traverses the lung, and this hæmorrhage may prove fatal. Or the suppurative process may be fatal. But once the cyst is fairly emptied, all danger ceases, provided the transit of its contents through the lung has left no permanent damage to that organ behind it.

We have quite a sufficient number of cases of a similar kind on record which have recovered, after the expectoration of hydatids, to show that our prognosis may be favourable, if only there have been free and full exit to the contents of the cyst. If, however, the cyst have not been emptied, or if there have been a second cyst, the symptoms may recur.

After Gardiner had ceased to expectorate hydatids, his nutrition very rapidly improved, his cough ceased, and his general health was re-established, and he left the hospital the end of December. The physical signs in the right side of the chest had not yet quite recovered their normal character. There was still dulness under the right clavicle, and in the mammary region, and the breathing, though vesicular, was feeble and slightly tubular. The lung had not yet recovered the compression it underwent. Two or three days ago (January 17) he came to the hospital, and we had an opportunity of again examining his chest.

We found his general health much improved, and he said he felt as well as ever. We detected slight dulness under the right clavicle, nearly as low as the mamma. The breathing was feeble, and the expiration prolonged immediately below the clavicle—pure in the mammary region. Percussion resonant in the axilla, and dull below the axillary region. There was some fulness in the hepatic region. This fulness may possibly be due to the cyst not having yet fully contracted.

I said that this man will recover upon the authority of many other cases of a similar kind. Among these may be mentioned the following :—

Andral mentions the case of a young woman, aged 20, who expectorated a chamber-potful of hydatids, and afterwards got quite well. There is another case quoted by Fouquier, which was set down as one of phthisis, but the man got quite well after expectorating hydatids. A third case is related in an early volume of the "Philosophical Transactions." It is that of a woman, aged 49, who suffered from cough and dyspnœa, and expectorated hydatids for five or six months, and completely recovered.

As to treatment, I know no cure for hydatids but the evacuation of them. There is a popular notion, that salt will kill the hydatid. Iodide of potassium has also been frequently tried, but I have never seen any real benefit from the use of these remedies. In a case where the diagnosis was very clear, I should not hesitate to advise the occasional use of emetics, as tending to dislodge the hydatids.

A communication has been received from this man, dated Nov. 11, 1851, stating that he "finds his health quite established, and that he is able to attend to his daily employment, without feeling the slightest return of his former illness."

CLINICAL LECTURE ON SURGERY,

AT

St. Bartholomew's Hospital.

By WILLIAM LAWRENCE, Esq., F.R.S.

CANCER OF THE ENTIRE LOWER LIP;

REMOVAL OF THE DISEASE, AND FORMATION OF A NEW LIP.

Gentlemen,—Cancer of the lower lip is seen under considerable varieties, more particularly as regards the extent of the disease both in thickness and depth, and thus requires corresponding differences in the surgical means required for its relief. In its most frequent form a portion of the red edge is thickened and hardened, so as to constitute an irregular swelling, of which the base is the natural integument, converted into a scirrhous structure, while the exposed surface is superficially ulcerated, or has a broken, fissured appearance, and affords a sparing discharge, which adheres closely, the edge being generally hard and knotty. The disease extends on the integument of the lip rather than on the mucous membrane; the subjacent muscular structure is sound. Nothing more is required here than a simple horizontal incision carried through the sound structures immediately below the diseased portion of integument; and this will suffice, not only when the disease is confined to the red edge, but where it has extended to the depth of half an inch or even more. The muscular parts, which had been depressed by the growth of the disease, gradually rise again, so that the natural line of the lip is nearly restored when the cicatrix is completed.

In the course of time the disease spreads along the margin, and affects the whole thickness and depth of the lip; and, if allowed to proceed, will involve the integument and muscular parts of the chin, which become tuberculated, hardened, and fixed to the bone. If, however, it should affect the lip alone, mere removal will not suffice, or rather, it would leave the patient in a worse condition than before, unable to close the mouth, afflicted with a constant flow of saliva, with involuntary escape of the food in eating, and great imperfection in articulation. In order to prevent these evils, it is necessary, after removing the diseased parts, to re-construct the lip, for which purpose the necessary materials must be procured from the immediately adjacent parts below, or at the side of the gap. Those covering the chin, and under it, will afford a sufficient supply, and when loosened by suitable incisions, can be drawn upwards so as to fill the vacancy caused by removal of the lip. As the cure advances, it will soon be found that this flap of integument can perform none of the functions of a lip: its edge turns in, and it becomes fixed to the bone; thus it cannot close the mouth, retain the saliva, or assist in eating or articulation. It is a fixed, instead of a moveable organ, wanting the lining of mucous membrane; unless, therefore, this essential constituent can be provided, we cannot consider that restoration of the lip is effected. You will find important information on this point in the work (a) of Professor Serre, of Montpellier, which I have brought for your inspection. He says, that in some cases, where the whole breadth of the lower lip had become affected, he had found the mucous membrane healthy, so that it could be detached and preserved. The diseased portion was then removed, and a flap of suitable breadth having been brought up from below, the mucous membrane was connected by sutures to its margin, and thus made a very useful lip. The figures, which I now show you, exhibiting the disease, the course of the incision, and the appearance of the parts after the completion of the cure, give a very favourable view of the ultimate result. I have met with no cases fit for this operation, having always found the mucous membrane involved in the mischief when it had become so extensive.

Where it has been necessary to remove the whole thickness of the lip, Professor Serre has proposed and practised a different and more extensive operation, of which the incisions and ultimate result are represented in his atlas. This proceeding was adopted, as you had the opportunity of seeing, in a patient who is still in the hospital, so that you may satisfy yourselves of its advantages by direct inspection.

(a) Traité sur l'Art de Restaurer les Defformités de la Face. 8vo, with quarto Atlas. Pasis, 1812.

CANCER OF THE LOWER LIP.

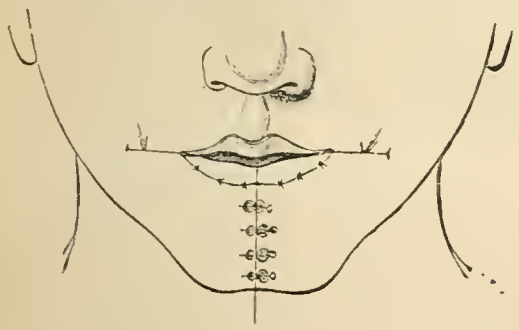
OCCUPYING ITS ENTIRE BREADTH AND THICKNESS, TOGETHER WITH THE SOFT STRUCTURES OF THE CHIN.—REMOVAL OF THE DISEASED PARTS, AND FORMATION OF A NEW LIP FROM THE CHEEKS.

J. H. Bennett, aged 52, a stout man, of healthy appearance, who had led an active seafaring life, had noticed a hardness at the red edge of the lip for above eighteen months. He consulted different surgeons, who had directed the employment of various escharoties, under which the disease rapidly increased. When I first saw him, the lip and adjacent parts were inflamed and much swollen from a blister, which he had applied on his own judgment. This temporary disturbance was soon quieted by a few leeches and bread poultice, under which some superficial ulcerations, caused or aggravated by the blister, healed.

The lip was enlarged, thickened, and hardened in its whole substance, the free edge being somewhat tuberculated; the skin, muscular, mucous, and glandular structures were all involved. Towards the middle there was a deep fissure on the margin and posterior surface, ascribed to a violent blow, by which the lip had been driven against a tooth. The integument of the chin was hardened, and, together with the muscular parts, less moveable on the bone than it ought to have been. The extirpation of such a mass, which in itself presented no difficulty, would have deprived the patient of the power of closing the mouth, unless a new lip could be formed from the neighbouring parts. Skin enough could be brought up from below, had the mucous membrane of the lip been in a sufficiently healthy state to admit of its separation from the cancerous mass. Plenty of integument could be found about the chin, but, from the absence of mucous membrane, it would have united to the raw surface of the jaw, and have failed to effect the object in view, namely, the formation of a new lip, free from the bone, moveable, and capable of closing the aperture of the mouth.

The operation, which I proceed to describe, is that suggested and practised by Professor Serre: it is the only method of establishing a new lip lined by mucous membrane. The diseased mass was insulated by two oblique incisions, commencing at the angles of the mouth, continued downwards and inwards over the lower jaw-bone, and meeting at an acute angle just above the pomum Adami. The distance of the two incisions, at their commencement, was rather more than two inches. It was necessary to cut away from the inside, at the left angle of the mouth, a hard tubercle of the mucous membrane, equal in size to a large pea; and thus the left upper angle of the incision consisted of integument merely. In dissecting the lip and chin from the bone, the muscular parts were found indurated, and closely connected to the front of the jaw. In cutting through them, strong indications of sensibility occurred, although chloroform had been freely administered, and there was profuse bleeding from numerous arteries. The next step consisted in making a nearly horizontal incision through the whole thickness of the cheek, on each side, from the angle of the mouth, along the line of the teeth of the upper jaw, and just below the opening of the parotid duct, to the edge of the masseter muscle. The flap formed by this and the former incision was sufficiently loosened by dissecting it freely from the subjacent parts, the mucous membrane being carefully separated from the bone. The two lateral

flaps were brought together in the mesial line, and secured by three hare-lip pins and the twisted suture,—thus representing a simple incised wound, taking a straight course from the middle of the new lip, formed at the expense of the cheeks, to the larynx. The mucous membrane and the integument were gently approximated by simple sutures at the edge of the new lip, and a few other points of suture were necessary. The operation, which was necessarily long, in consequence of the extent and variety of the incisions, and the necessity of delaying the union of the cut surfaces until the hæmorrhage, which was considerable, had ceased, fully accomplished the main object, that of bringing together, from the sides of the face and lower jaw, a sufficient quantity of parts to fill the great vacancy caused by removing the entire lower lip and chin. As the breadth of the wound at the mouth exceeded two inches, the parts, when approximated, pressed firmly against the teeth; the pain thus caused was relieved by introducing between them thin portions of lint slightly greased. For some hours the patient suffered severe pain, especially in the front teeth, consequent, probably, upon exposure of the mental nerve. This gradually ceased, when he felt tolerably comfortable, and passed a quiet night. The day following, I changed the thread around the upper hare-lip pin, and carefully cleansed the wound. The pins and all the sutures were removed on the fourth day, when it was found that, in spite of considerable strain on the soft parts, from their approximation over so considerable a gap, union by adhesion had taken place along nearly the whole of the cut surfaces. There was a small aperture below the edge of the new lip, and another below the chin, through which the secretions from the internal wounded surfaces found escape. The only unfavourable circumstance of subsequent occurrence was a slight failure of union at the edge of the new lip near the left angle of the mouth, where it had been necessary to remove the indurated portion of mucous membrane. The skin, thus deprived of support behind, curled inwards; firm union was established in all other parts, both of the middle and lateral wounds; and the patient, upon quitting the hospital, was able to articulate, to masticate, and to move the jaw freely. There remained, however, a defect, at the point already mentioned, which I intended to remedy at a future time, by paring the edges, and bringing the parts together, as in the operation of hare-lip.



I saw this patient at the end of a few months, during which he had enjoyed good health, had been free from uneasiness, and able to attend as usual to his affairs. There was, however, so much of swelling and induration, especially towards the chin, as to show that disease was returning. This leads me to apprise you, that, however perfectly the purposes of an operation may be accomplished, and however promising appearances may then be, the future prospect is less favourable, especially where disease has been allowed to extend so considerably as in the present instance. In many cases, we do not know what becomes ultimately of our patients, especially those whom we treat in public institutions; but we sometimes meet with them again at distant periods, and thus find that, even under the favourable circumstances of an early operation, where the disease has been confined to the red edge of the lip, and where there is no return in its original seat, the absorbent glands in the neck may become scirrhous. A long time ago, I operated on a patient little more than 30 years of age, in whom the affection, not extending beyond the red portion of the lip, was of short date. He called on me at the end of seven years, on account of what he considered a new complaint, which I found to be a scirrhous mass under the side of the lower jaw, as large as a small orange, the lip remaining perfectly sound. In a few weeks, the diseased glands formed a mass nearly as large as my fist. Shortly after, I saw a patient similarly circumstanced at the end of four or five years. I have seen other instances, in which, the lip and cicatrix remaining unaltered, disease has come on in the cheek, at the side of the lower jaw, or in the absorbent glands of the neck, at various periods, from a few months to four or five years. In other cases, the disease is reproduced in its original seat, especially where it had advanced further on the lip before operation. In such instances, the malady returns more quickly.

[To be continued in our next.]

LECTURES
ON
DIGESTION, RESPIRATION, AND SECRETION,
AT
The Royal Institution,
To the Members, and to the Pupils of St. George's Hospital.

By H. BENCE JONES, M.D., F.R.S.
Physician to St. George's Hospital.

[Continued from last Volume, page 610.]

ON ALBUMINOUS URINE.

I have, gentlemen, in these lectures on excretion, endeavoured to show you those different forms in which the excess of food, and the substances which have served the purposes of life, pass out of the body. I have tried also to give you the reason why some substances cease to be dissolved in the water which is carrying them away, and thus form those concretions which constitute the different kinds of stone. I have already shown you, that in health some substances are passing out in the urine which are so soluble in water that they never occur in the solid form. The alkaline phosphates, the sulphates, the chlorides, urea, are examples of substances which are never absent, are always passing off from the body, but never make themselves apparent by becoming insoluble, and thus never enter into the composition of calculi. I must, in this and the following lecture, add to the number of these soluble substances which may be excreted. The two excretions are albumen and sugar; they never form calculi, and they never can be seen in the urine, unless by chemical reactions they are made to appear. Moreover, both of these substances occur in states of disease, and are never found in healthy urine; but they are so important in their relations to the two great classes of nitrogenous and non-nitrogenous organic substances which constitute our food, that I cannot hesitate to dwell on these two states of disease in the two following lectures.

The first of the four great classes of food, you will remember, was the albuminous class. The second that I mentioned contained the non-nitrogenous organic substances, sugar and starch. In certain states of disease, these substances, after entering into the blood, instead of being used for the purposes of life, or instead of undergoing those changes which they undergo in the healthy state of the body, through some defect or interruption are thrown out of the body, in the same state, or nearly in the same state, in which they entered into the body. In the one case albumen, in the other sugar, appears in the urine. There is no relation of the one disease to the other; and certainly in the causes of the two diseases there is not even the slightest analogical resemblance between them.

Regarding the composition and properties of albumen, I have already spoken, both in the lectures on food, and in the lecture on the blood; but I wish now to dwell a little more in detail upon the test for albumen—upon the means of determining its presence or absence in the urine. It does not exist in urine in a state of health, because, if I boil any specimen of healthy urine, and acidulate it, I shall get no trace of a precipitate. Heat alone will give no precipitate, unless it happens that the urine is neutral, or only slightly acid. You will remember, that when the acidity is slightly removed, so that the urine approaches towards alkalescence, it will always give a precipitate by heat. Moreover you will remember, that

in that case the precipitate disappeared on the addition of a drop of acid; but a precipitate of albumen, formed by heating it, will not easily disappear. On the addition of a drop or two of acid, it will remain as thick as before. (Experiment.) Healthy urine, then, never gives a precipitate by heat which is insoluble in acid. Any urine whatever that gives a precipitate by heat which cannot be re-dissolved by a drop of acid, contains albumen. But to make still more sure of this point, there are other tests to be used in confirmation of your experiments. The errors which result from relying on a single test are well illustrated in the example of albumen. How many mistakes have resulted from trusting to heat alone, or to acid alone. With nitric acid alone a precipitate may be obtained. I showed you one example in the precipitation of urate of ammonia, and I may show you another instance, in which, by the addition of this acid alone to urine, an effervescence will take place, and in a few moments the liquid will become perfectly thick. (Experiment.) This arises, not from any deposit of albumen or urate of ammonia, but simply because urea is present in excess, and the *nitrate* of urea crystallises out and forms a precipitate. This is unlikely to occur; but I have known this precipitate mistaken for albumen; and, as it serves to illustrate the necessity for using a double test for albumen, and the danger of trusting to any single test, it is mentioned here. Let me show you how the application of heat proves that this is not albumen. Rapidly effervescence ensues, the urea is destroyed by the nitric acid, and the fluid becomes clear; so also when nitric acid gives a precipitate of urate of ammonia, or urate of soda. Here is a specimen of urine which, with a drop or two of acid, will give a precipitate, (experiment); but it will not remain permanent. On heating it, the precipitate will be rapidly re-dissolved, being decomposed into free uric acid and nitrate of soda, or nitrate of ammonia. A permanent precipitate, then, with heat and with acid, constitutes a good and a ready test for albuminous substances. Many additional tests have been given; and, as some of them may be occasionally used for minute quantities of albumen, I may show you the most remarkable. If I take a small portion of urine which contains albumen, and add to it a little acetic acid, I get no precipitate—acetic acid cannot coagulate albumen like nitric acid; but if I add also a little ferrocyanide of potassium, I get a plentiful precipitate. (Experiment.) The urine must be acidulated to make sure that the precipitate consists of albumen. Alkaline urine would give a precipitate with ferrocyanide of potassium when no albumen was present. Here is another beautiful test for albumen, which I have already brought before you, but the experiment is worth repeating. If I take urine containing albumen, and add to it a little sulphate of copper, and then an excess of caustic potash, I get a beautiful blue colour, which rapidly becomes purple. (Experiment.) If I heat this mixture, it soon assumes a much more red hue. It will not rapidly reduce the oxide of copper. I have shown you how with this test we can determine the presence of sugar by a rapid reduction. In the case of albumen, however, the oxidation is very slow. I have here a portion which I acted upon this morning; and though it has been standing some hours, there is no remarkable reduction of the oxide of copper. Here is also another test, and which for very small quantities of urine is useful. If a single drop of healthy urine is placed in a watch-glass, and left to stand till it is evaporated to dryness, and this is constantly the case in microscopical examinations, on the glass where the object is placed,—if the urine contains no albumen, you will find that the glass can be cleaned with the greatest ease; the whole of the residue can be removed without the slightest trouble. But, if there is the least trace of albumen, when the water has gone off, and all that is volatile has escaped, the albuminous substance is so strongly adhesive, that it will form a small film upon the glass, which no rubbing can remove. I have here a glass with such a residue upon it, and I cannot remove it without scraping it off, or re-dissolving the albumen in water. Before I leave this subject, let me show you one other re-action of albuminous urine which is important, because it often leads to mistakes regarding the presence or absence of albumen. The usual method of examining urine is by the application of acid and heat to two different specimens of urine. Nitric acid is commonly used, because it gives a more marked precipitate than the other mineral acids. Not unfrequently, when a precipitate falls, the contents of the tube are thrown away and another portion of the urine is taken to which heat is applied. Let me show you the effect of using a differen specimen for the purpose of determining the action of heat. Here is a specimen of albuminous urine, which is coagulable by heat, and on adding nitric acid the albumen falls; but if I throw it away, and examine another portion in the same tube, and then apply heat, the urine will not coagulate as before. (Experiment.) The only difference is, that the one tube was clean and the other dirty. In the one tube there was no trace of nitric acid; in the other a very small portion of nitric acid was left; and this small quantity of nitric acid prevented the urine from coagulating on the application of heat. In St. George's Hospital this has occurred to me over and over again. I have examined urine, and said there was albumen in it; and others have come to me a little time afterwards, assuring me that there was no albumen present at all,—on boiling the urine they got no precipitate. The reason was, that the tube in which they tested the urine was not a clean one. They not only had albumen in the urine, but they also had a little nitric acid, and thus a compound of nitric acid and albumen was formed. The minutest trace of nitric acid is sufficient to combine with the albumen, and to change its properties, and to prevent the coagulation by heat. If I add an excess of acid, however, I shall get a precipitate, because nitrate of albumen is insoluble in dilute nitric acid, and falls as a precipitate. Alkalies also hinder the coagulation of albumen by heat. I have here some urine which I will make highly alkaline. You see it darkens in colour, as albuminous urine always does on the addition of alkali. If, then, I boil this highly alkaline urine, I shall get no coagulation by heat; I might boil it for an unlimited time without getting any precipitate. Thus, then, both acids and alkalies can interfere in the important re-action of heat on albuminous urine; they can both hinder the coagulation of the albumen. Practically, it is very important that this should be known, for if urine should be highly alkaline from carbonate of ammonia or from fixed alkali, or if it should be intensely acid, it may not give any precipitate by heat, although albumen may be present in considerable quantity. So that the perfect test for albumen consists, as I have said already, not in heat alone, nor in acid alone, but in the joint action of the two re-agents upon the same specimen. If you are unable to use more than one, then the surest and most delicate test is, that of the nitric acid. If it gives no precipitate, you may be sure that very little, if any, albumen is present; and if it give a precipitate, it is most probable that albumen is present. To be certain, heat must be applied. If the precipitate be permanent on boiling, you may be sure that albumen is present. When very minute quantities of albumen are present, heat should be applied first, and a drop of acid should be added afterwards.

Having spoken at such length upon the tests for albumen, I must say a few words—and they must be but few—upon the diseases in which this substance is accustomed to appear in the urine. Albumen for the most part occurs in patients who either have disease of the kidneys, or who have blood in the urine; the former alters the secretion entirely, generally making it much more dilute or watery than it otherwise would be; and the latter can frequently be seen by the naked eye. If the blood, however, is not visible by the naked eye when the urine is first passed, yet, after it has been allowed to stand for some hours, the blood-globules may fall down and may become apparent, as for example in the specimen before you. When the urine is fresh, the blood globules keep their perfect form, and in the course of twelve hours fall as a distinct sediment, forming a deposit from the urine; the red globules can be seen as a very minute and delicate layer at the bottom of the glass or bottle. The preservation of the globules depends upon the saline constituents of the urine hindering the action of the water upon the envelopes. If I mix blood globules with distilled water, the pure water will be found to act most potently in dissolving them; but, in water containing salts in urine, or salt water, the globules will fall down without being acted upon. The salts in the urine, as the chlorides, the phosphates, and sulphates, of which I have spoken, hinder the action of the water, and allow the blood globules to be detected with ease with the naked eye, or with the microscope. The globules can of course be less readily detected by the naked eye than by a microscope; such a microscope as I showed you in my lecture on the oxalates, is quite sufficient for the purpose. The most distinctive mark for determining whether the cortical structure of the kidney is affected or not, is

founded on the microscopic appearance of the fibrin. In cases of hæmorrhage from the kidney the fibrin appears in granular patches. Thus, in Bright's disease, it assumes peculiar forms or casts, depending upon the place of its effusion. Such urine is generally of a low specific gravity; it contains a slight sediment, which, when examined, consists of epithelium, mucus, fatty granules, and fibrin. This last has a peculiar form and shape. Instead of forming granular masses, it is moulded in the ducts of the kidney; the fibrinous moulds are often full of granular matter, sometimes of nucleated cells, sometimes of blood, sometimes of crystalline substances, as uric acid, or oxalate of lime; the microscope alone can detect these substances, and it can do so with the greatest ease. Sometimes (though much more rarely) the urine is of an exceedingly high specific gravity. Here are two specimens, the one of low, the other of high specific gravity. If I add nitric acid to either there will be a plentiful precipitate (Experiment); and this precipitate, when boiled, will not disappear, showing that albumen is present. One urine has three times the specific gravity of the other, one being 1030, the other being only 1010. The denser specimen has thrown down, by standing, a considerable deposit of urate of ammonia, that substance which is soluble by heat. So that if I heat this specimen of thick urine, the first effect will be that it will become clearer, because the urate of ammonia which was precipitated is soluble in warm water. If, however, I continue heating it, I shall, if the urine be not too acid or too alkaline, have a dense precipitate of albumen. (Experiment.) The precipitate is now forming. That it does not consist of phosphates may be proved by adding a drop of hydrochloric acid, which would immediately dissolve the earthy phosphates. The quantity of albumen which is thrown out in the urine varies very considerably, even in the same case, at different times, varying from 2½ grains to 15 grains in every 1,000 grains of urine. The loss of albumen in twenty-four hours is from 1½ drachms to 3 drachms on an average. The extremes being 45 grains and 5 drachms. Albumen, you will remember, exists in the solids of the serum. The solids of the serum of the blood in Bright's disease (as I showed you in one of my tables in the lecture on the blood, No. 57, p. 113) are below the average amount, viz., 74·8 parts instead of 80 parts in 1000 parts of blood. Dr. Christison gives in one case 52 parts per 1000 blood. The reason why the solids of the serum are reduced in this disease is, that they pass out of the body. Every portion of the urine has a portion of the albumen of the blood passing away with it. As rapidly as food is taken to supply the albumen, so rapidly is it partly lost in the urine; thus the blood is impoverished, and at the same time, in consequence of the alteration in the structure of the kidney, the urea and uric acid accumulate in the blood instead of passing off in the urine. It is not impossible that other substances, as, for example, oxalic acid, may accumulate in the blood in this disease, and thus may cause the symptoms of poisoning which are so often met with. At least, it is certain that urea is not possessed of very poisonous properties. Probably not being much more poisonous than nitrate of potash.

I will now mention an instance of a substance closely allied to albumen, first observed by Dr. Macintyre, in the urine, and described by me in the *Philosophical Transactions* for 1848. If I take healthy urine and albuminous urine, and add alcohol in equal quantity to the two specimens, the result will be very different. If I add alcohol to healthy urine, there is but a very slight precipitate, consisting chiefly of the sulphates, which are insoluble in dilute alcohol. The addition of alcohol to albuminous urine, however, gives a plentiful precipitate; the principal portion of the precipitate is albumen, but, of course, the sulphates are precipitated likewise. I have here, in a bottle, about six ounces of urine, passed by the patient whose case is described in the *Philosophical Transactions*. The bottle was filled with alcohol, and you see the inordinate quantity of precipitate which was formed. The precipitate has all the appearance of, and might be mistaken for ordinary albumen, as far, at least, as precipitation by alcohol is concerned. I have here a portion of this peculiar matter which was collected on a filter, washed, and re-dissolved in water; so far it may be taken to represent the urine which was passed. Let me examine it, and see if it has the ordinary re-actions of albumen. If I boil it, I shall find that there will be no precipitate. (Experiment.) On boiling there is no precipitate. You might say, that this arises from the liquid being too acid or too alkaline. By testing it, it might possibly be found to be slightly alkaline. But let me take another portion of the solution, and test it with nitric acid. I told you that, for the most part—and I guarded myself by saying for the most part—if nitric acid gave no precipitate, no albumen was present. I try nitric acid, and you see there is no precipitate formed. (Experiment.) Thus, I may conclude, that as neither heat nor acid gives a precipitate, I have no albumen in this urine. I have, nevertheless, an albuminous substance, but it differs somewhat in its re-actions from ordinary albumen. After this liquid has been boiled, and nitric acid has been added, if it be allowed to cool, a precipitate will be rapidly formed. I will cool this rapidly by agitating the test-tube in cold water, and you see it becomes almost solid, and re-dissolves when heated. (Experiment.) You may remember, that I showed you a similar substance existing in beef-tea,—a substance which gave no precipitate with heat or acid until it was cooled. I mentioned then, that I had found such a substance in a case of disease; and this is the case I alluded to. If I apply another test for albumen,—if I acidulate the liquid, and then add ferro-cyanide of potassium, you will see that I shall have a plentiful precipitate, indicating the presence of an albuminous substance. This substance, on analysis, differs in composition from ordinary albumen, containing rather more oxygen; it appears to be one of the oxides of albumen, and not albumen itself. It occurred in a case of mollities ossium, in which I believe that free chlorine was at the same time passing off in the urine; but I could not satisfy myself on this point until after the patient was dead. The patient's appetite was sometimes ravenous; and no wonder that it was so, for every thousand grains of urine, as the following analysis shows, carried off as much albuminous substance as if a thousand grains of blood had been taken away.

Analysis of the Urine in a Case of Mollities Ossium.

Water	= 890·7
Albuminous substance	= 67·0
Urea	= 29·9
Uric Acid	= ·9
Earthy Phosphates	= 1·2
Chloride of Sodium	= 3·8
Sulphate of Potash	= 2·1
Alkaline Phosphates	= 4·4
	1000·0

Here is a specimen of this substance purified by means of frequent washing, re-precipitation, and treatment with ether.

In cases of so-called chylous urine, albumen appears in the urine. I have here a specimen of urine made by a patient suffering from this disease. It was passed as white as you see it—indeed, whiter; for, as it has been standing for some months, it has become a little darker by slight decomposition. In another portion of this same urine, you see the white matter has risen up into a curd. If I take a portion of this urine and treat it with ether, I shall find it contains a substance perfectly soluble in ether; for, by agitating the two together, the urine loses its thick appearance, and becomes very nearly clear. (Experiment.) The ether rapidly separates again, carrying with it a great deal of fat, a slight deposit taking place. If I pour off the ether, and evaporate it to dryness, I shall get, not a crystalline mass, for the fat is not crystallizable, but a mass of fatty matter, such as you see in this specimen, which has been collected from many quarts of urine. I have here other specimens of the same urine, passed at different hours, in which no fatty matter is seen, nor can any be extracted by ether: but if I add nitric acid and apply heat, I shall find that there is plenty of albumen present. So, also, if I add nitric acid to the liquid from which the ether was poured off, I shall be able to show, by the dense precipitate which is formed, that, in addition to the fatty matter, there is also a considerable quantity of albuminous substance present. An interesting point, on which I was enabled to satisfy myself in this case, by drawing blood from the arm, was, that the blood did not contain any excess of fat whatever. The fat and the albumen only came at certain periods of the day; and if I kept my patient quiet, that is, if I made him lie in bed, or if I examined the urine early in the morning, before he got out of bed, I found comparatively healthy water, most commonly not containing the slightest

trace of an albuminous or fatty substance. If I made him get up before breakfast, and walk about, he would pass urine containing no fat, but giving evidence of albumen in plenty, and sometimes, also, so much fibrin that the urine would coagulate, not into a white mass like blanc mange, but into a sort of jelly-like, brownish coagulum, consisting of fibrin, tinged sometimes with the colouring matter of the blood. If I made him take breakfast before exercise, the urine was milky, as in the specimen before you; but, by making him lie in bed, the water was more healthy; whilst by giving him much food, more especially fatty food, an increased quantity of fat appeared in the urine. I made many experiments as to the effect of food, exercise, rest, and medicines; these are recorded in the *Philosophical Transactions* for 1850, but more perfect medical details are given in the *Medico-Chirurgical Transactions* for the same year. The patient is an intelligent man, who keeps an accurate record himself of the appearance of the urine each time it has been passed since I first saw him a year and half ago. There has been no trace of the disease for many months, except on last Christmas-day. I had warned him that anything that gave increased violence to the circulation would bring the complaint back again; but after eating and drinking on Christmas-day, like other people, he came to me the next morning, bringing with him a specimen of his urine, which was milky. He was again put on the treatment which had proved efficacious before—gallic acid and rest, and again with perfect success. As much as a drachm or a drachm and a half, and even two drachms of gallic acid being given in the course of the day. Since Christmas the urine has been perfectly healthy, and I believe no fat or albumen will be found in it again, unless violent exercise is taken. With such exercise the feeble vessels allow these substances to pass through; but with rest and gallic acid the vessels are contracted, and thus the disease is checked.

The following Table of the influence of diet, of pressure, by means of a strong belt, and of medicines, is taken from the *Medico-Chirurgical Transactions*, and is worth repeating here:—

On the Effect of Diet and Medicines on So-called Chylous Urine.

	Chylous in Different Degrees.	Free from Chyle.
On animal food in 1000 observations	968 times	32 times
Vegetable food ,,	910 ,,	90 ,,
Pressure-belt loose ,,	667 ,,	333 ,,
Pressure-belt tight ,,	638 ,,	362 ,,
When matico was taken ,,	474 ,,	526 ,,
When gallic acid was taken ,,	17 ,,	983 ,,
After gallic acid was taken ,,	0 ,,	1000 ,,

The most interesting fact connected with this case of albuminous urine was the occurrence of the albumen only at certain periods of the day. It is very probable that this disease in a much milder form occurs more frequently than has been supposed, and possibly these are the cases in which gallic acid has been said to stop the albumen in the urine in Bright's disease.

ORIGINAL COMMUNICATIONS.

ON RESECTION OF BONE;

WITH CASES OF RESECTION OF THE RADIUS, OF THE ULNA, AND OF THE ELBOW-JOINT.

By WILLIAM FERGUSSON, Esq., F.R.S.,
Professor of Surgery in King's College, London, and Surgeon to King's College Hospital, etc.

Diseases of bone have always attracted much attention from professional men, and the management of such cases has, in modern times, probably in the estimation of many, kept progress with the general advance in surgery. It has often appeared to me, however, that the surgeon has not fully availed himself of the facts which have been laid before the Profession by certain practical men who have carried their means of cure beyond the routine of treatment generally pursued; and that, consequently, in some respects the practice of surgery is not so generally efficient in regard to some such diseases as it might otherwise be.

While cordially approving of the modern alliance of physic and surgery, I cannot but fear that errors have been committed in the just application of each. There may have been too great reliance on medicine to effect a cure, or, possibly on the evidences of the failure of such agency, the diseased part may have been sacrificed by amputation when an operation more limited in its characters might have sufficed for a satisfactory result. In either case there has been the extreme of medicine or the extreme of surgery; viz., a persistence in the power of physic until death, or the last resource of surgery—amputation.

The grand object of surgery, properly so called, may be defined, aphoristically, to be THE PRESERVATION OF THE GREATEST PORTION OF THE BODY AT THE SMALLEST POSSIBLE SACRIFICE; and, as amputation has at all times been deemed the opprobrium of surgery, whatever may serve to avert this last resource, while it removes local disease, may be fairly said to effect this object. That surgeons labour industriously and successfully on such a doctrine, there is daily proof, for, with the judicious use of medicine, attention to locality and diet, and a just appliance of surgical means, much has been done in modern times to avert the necessity of amputation. So much, indeed, that the operation is now comparatively rare; and there can be no doubt that this proceeding has very frequently been averted by those operations which are included under the modern terms of excisions and resections.

Whatever may be the view of the politician regarding conservatism, it may emphatically be designated the prime object of the surgeon, and conservative surgery may truly be said to be the order of the day. Much that has been done in this way is justly attributable to modern surgeons, some of whom are still living in the vigour of practice, and from among whom a better example could not be selected than the present acknowledged and justly respected head of surgery in Great Britain, Sir Benjamin Brodie, who, besides the benefit he has conferred on all by his admirable work on the joints, has given one of the best illustrations of what I have ventured to term conservative surgery that could well be selected for illustrating these observations. In 1824 Sir Benjamin amputated a leg for a painful disease in the lower end of the tibia, of twelve years' duration, which had resisted all treatment. On examination of the bone afterwards, an abscess, about the size of a chestnut, was discovered in its centre, at the seat of the protracted pain under which the patient had suffered. Three years after, Sir Benjamin, in a somewhat similar case, applied a trephine to the affected part, let out the matter, saved the limb, and made a complete cure; so that, in 1816, the patient continued well. Similar operations have frequently been performed since, and may well be classed among the most brilliant of modern surgery.

In diseases of bone, it is admitted, that in necrosis, a cure cannot take place until the dead bone has been discharged spontaneously, or removed by the surgeon; but, when caries is present, it is still a subject of dispute, whether this condition will spontaneously get well, be converted into necrosis, or remain incurable without some actual interference with it.

It is not my object here to discuss the difference (if there be any—an opinion which I hold myself) between caries and ulceration of bone; suffice it to say, that in many instances of necrosis, and what is usually denominated "caries," all hope of a cure, without an operation, is given up, and amputation or resection is the only choice. That

amputation is the rule of practice in such cases seems to me beyond doubt; and perhaps, upon the whole, the greater number of cases probably admit of no other means of treatment.

My own experience has long led me to doubt the propriety of the surgeon's decision in some of these cases, and while most men of the present day admit the advantages of resection and excision over amputation, it has often appeared to me, that this "opprobrious" operation has been selected, while the "conservative" might have given occasion for the display of some of the best features of true surgery, irrespective of its justly esteemed alliance with physic.

The object of the present paper is not so much to offer anything new to the Profession, as to draw attention to subjects which are in many respects familiar; but which, were I limiting the formation of my judgment solely to the cases about to be detailed, I have many reasons to think are, after all, not justly appreciated by the mass of those who practise surgery even in the present day.

Conservative surgery has been carried to a high pitch in modern times, as regards the upper extremity especially; and now in cases of severe injury it is the surgeon's glory if he can boast of saving even a single finger or the thumb, instead of amputating the hand, as has too frequently been done. In disease of bone, the aspect of the limb is often so appaling that amputation is deemed the only alternative between hopeless misery or the prospect of a cure by an operation. That better may be done in some cases than amputation, the following examples will, I trust, give proof; and I shall defer some further remarks, in accordance with the above views, until the details have been given.

DISEASE OF THE RADIUS—RESECTION OF NEARLY THE WHOLE OF THE BONE—RECOVERY.

Case 1.—Josh. William Hart, aged 8, in King's College Hospital, December 8, 1845; a native of London, where he has always lived. He enjoyed good health until four years ago, when he had the measles, and passed a worm four yards long; three years and a half ago an abscess formed on the right forearm, which increased in size and was painful. He attended at Bartholomew's Hospital, where it was opened; other abscesses appeared from time to time, and his health began to decline. He has been attending under Dr. Farre, taking tonics, which have improved his general health. At present there is one sore in the right axilla on the inferior edge of the pectoralis-major muscle, and two others in the right forearm, two inches below the elbow; they are of an indolent, strumous character, and allow a probe to pass in different directions. Mr. Fergusson examined the two in the forearm, and thought the ulnar edge of the radius was separating. Tongue furred, bowels regular, pulse 95.

December 16.—His health is still very low. The sore on the forearm has increased in size, and another fistulous opening has appeared nearer to the elbow; they are all indolent; his appetite is not so good; his health improved slightly after being in the hospital, but the sores in the arm increased in size, and discharge much unhealthy matter.

On February 18, the sore in the axilla was less and more healthy, but those in the forearm continued to discharge, and the bone remained as firm as ever.

On February 28, Mr. Fergusson determined to excise the shaft of the radius, or such portion as it might seem requisite to remove at the time of the operation. The limb being held firm, Mr. Fergusson proceeded to lay bare the outer and posterior surface of the radius, by means of an incision in the direction of the fibres of the extensor communis, avoiding as much as possible doing injury to the various muscles and tendons. Having exposed the diseased portion, the bone was cut through below the insertion of the biceps with the cutting forceps, and removed, with the exception of the carpal epiphysis. The wound was closed with sutures, two ligatures having been applied. The proceeding did not occupy more than 15 minutes.

March 3.—He had not suffered much since the operation, and said he had much less pain than before it was done. The forearm was swollen, but the wound looked very healthy, considering that it was made through a number of old, indolent sores.

By March 16, part of it had healed, and the swelling and pain in the forearm had disappeared. The sore in the axilla was much more healthy, and his general health had much improved. He continued to improve; the old ulcerations began to heal; and he began to have freedom of motion in the arm. His health became pretty good; but, as his mother could take him out of town, he was made an out-patient, coming twice a-week to have it dressed.

Discharged April 10.

After leaving the hospital, the wound gradually healed up; in the course of time, the boy acquired considerable strength in the arm, and most of the movements, even those of supination and pronation of the hand, were perfect, although not equal in vigour with those of the other.

This patient showed himself at the hospital a few months ago in the enjoyment of excellent health, and the free use of his hand. A cast was taken of the parts, and this sketch gives a faithful outline of the appearance of the hand and forearm.

In the line of cicatrix, there is a hollow where the radius formerly was; and the outline resembles that of the arm when the radius has been indifferently set after fracture.

The upper end of the radius is almost invariably removed in excision of the elbow-joint, and cases have been recorded of excision of the lower articulating surface. Portions of the shaft have also been taken away; but I am not aware that so large a portion has ever been removed from the living body at one time. The disease seemed to me a combination of necrosis and caries. There was a dead friable portion in the centre of the shaft, involving nearly the whole thickness of the bone, which had not entirely separated; while there was extensive ulceration and softening of the osseous tissue above and below, sufficient to preclude the hope of a spontaneous cure.

I cannot doubt, that, had resection not been performed in this case, the boy would have suffered for many years, and the part would probably have been ultimately removed by amputation.

DISEASE OF THE ULNA AND ELBOW-JOINT.—RESECTION OF NEARLY THE WHOLE OF THE ULNA AND OF THE ELBOW-JOINT.—RECOVERY.

Case 2.—William Campion, aged 16, a native of London, was, in July, 1847, admitted into King's College Hospital. He had broken his forearm eight years before, and for the last two had been a patient at Bartholomew's, where he had several pieces of diseased bone removed. When admitted, he had a large ulcer on the outer and posterior side of the forearm, extending downwards for about five inches. In parts the bone was laid bare. The elbow was semiflexed, and had lost all motion. The right hip was also diseased, and there were several fistulous openings on the outer and under part of the thigh. There was no shortening of the limb, and no dead bone could be detected.

After remaining in the house his general health improved, and the ulcer got rather smaller.

August 4.—The patient was placed under the influence of ether. Mr. Fergusson then made an incision six inches long on the edge of the ulna, and, the bone being laid bare, it was divided about an inch from the styloid process with the cutting pliers. On examining the tissues at the upper part of the forearm, the joint was found to be diseased, and it was removed with the whole of the ulna. The patient was quite unconscious during the operation. The edges of the wound were brought together by three sutures, and water-dressing was applied. After being put to bed he vomited, and did not recover his consciousness for several hours.

15th.—Had severe pain, and he had a slight attack of diarrhœa, which was stopped by chalk mixture, etc.

16th.—Had less pain. The wound was dressed with wet lint. He slept well. Pulse 90.

21st. The wound gives him little pain. It is dressed with

myrrh lotion, and looks well. Tongue clean, appetite good.

24th.—To-day the arm was more flexed, and a bandage was applied to keep it in position. The wound looked well; the humerus projected a little.

He left the hospital in December with the wound nearly healed. He attended three months as an out-patient. He then went to Enfield; the arm soon became strong, and he has supported himself ever since in a sealing-wax manufactory. He finds the semiflexed position very convenient, and the right arm is nearly as strong as the left. The elbow-joint is anchylosed. He has almost perfect use of his hand, and can grasp a stick firmly.

This lad has come to the hospital occasionally, and within these few weeks a cast has been taken of the arm, from which this figure has been taken.

At a glance, it is scarcely possible to recognise the difference between the two arms; but a slight examination shows that it is not so bulky as the other. The lad is very muscular for his size, and it is astonishing with what power he can grasp. Flexion and extension at the wrist are perfect, and the same may be said for his fingers, but there is scarcely any movement resembling supination or pronation.

Portions of the ulna have also been frequently removed for caries and necrosis; sometimes from the shaft; sometimes the lower extremity has been detached, but most frequently the upper, in the re-section of the elbow-joint. In former years, I have seen Mr. Syme occasionally, in his operations on this joint, remove considerable portions of the upper part of the bone, and I have frequently done so myself; but I have never, in any instance, known so much of the bone taken away, either by itself, or in conjunction with the ends of the other bones forming the elbow-joint. The disease was principally caries, conjoined with considerable swelling, and complicated with disease of the elbow-joint. Before commencing the operation, I was aware that the disease in this joint was in part cured by anchylosis; but, in the progress of the operation, there was sufficient evidence of further disease in the articular extremities of the bones to induce me to take all away.

Other circumstances besides the extent of the operation were unfavourable to this boy's recovery. He had long suffered from disease of the hip-joint, and, although anchylosis was present, it seemed doubtful if the disease was cured, as there were still sinuses open. The mischief here, however, seemed now to produce little evil influence on the system compared with the state of the arm, and the removal of the greater evil relieved the constitution, so that it bore up against the remaining disease of the hip. Even now, although the boy is in vigorous health, these sinuses are not closed and occasionally give a little annoyance.

It is certainly an unfavourable circumstance, that there should be disease of a bone, or joint, in another part of the body than that where the surgeon contemplates an operation; but this, in my opinion, should not be an insuperable objection to his interference with the most harassing disease present, provided always that the other disease is not beyond the hope of cure either by nature or by his own hands. The latter view must, however, be acted on with great caution and judgment; and I have referred to it here chiefly to show, that disease of the kind above described may be cured by operation in one part in the course of a few months, while a sluggish action of nature may extend over many years in another part of the same frame. The above case will show, too, that I do not concur in the views of some who carry non-interference to an extreme extent, as I consider it; for I have known an eminent medical man protest against Chopart's operation in the foot for incurable caries, on the score that the disease would be sure to show itself in some other part of the body! Such, however, has not happened during the six years which have elapsed since the condemned operation.

I regret that casts were not made of these arms before operation; but the principal reason for this omission was, that the appearances did not attract any particular notice. The following case, however, was one where the external indications of disease were such as to attract notice from even the most casual observer. The cast from which this figure was drawn, gives an accurate representation of the

external aspect of the elbow in the following case:—

DISEASE OF THE ELBOW-JOINT—GREAT SWELLING OF SOFT PARTS—RESECTION, AND RECOVERY.

Case 3.—George Collis, aged 12, admitted into King's College Hospital, August 22 1849. Has always been delicate, and has suffered from strumous affections in various parts of the body. Two years before his admission he fell on the right elbow, and took no notice of the fall at the time; but at the end of a few days inflammation set in, and since then, up to the present time, he has never been able to use his arm. He was treated by a surgeon, and also remained thirteen weeks in the Brighton Hospital, where he had been five years before, for disease of the thigh-bone; he derived no benefit from the treatment, and was sent up to this hospital to be under the care of Mr. Fergusson. On his admission the elbow-joint was much enlarged; its mobility was quite gone, and there were several old sinuses communicating with the joint, from which a quantity of strumous, unhealthy-looking matter was discharged: the forearm was semiflexed and pronated, and any attempt at motion gave severe pain. His thoracic and abdominal viscera seemed healthy. Mr. Fergusson determined at once on excision of the joint.

On September 1st he was put under the influence of chloroform, and an H shaped incision was made at the back of the elbow-joint. The tissues were found to be in a very thickened state. The end of the ulna was carious and much enlarged, and the ends of the humerus and radius were also enlarged and spongy; they were removed, and, after a vessel on the outer side of the wound which had bled freely had been tied, the wound was closed with five sutures and strapping. The ulnar nerve was not seen during the operation. On the next day the tension of the parts was so great, that all the sutures were removed. He was rather feverish until the 5th; he then went on well.

On the 15th the wound looked very healthy, and filled up fast.

On the 20th he could move the forearm, and on the 28th October he could flex the fingers and forearm very well.

On November 8th there was still a considerable sore; the granulations were pale and flabby, as if they were in connexion with diseased bone: and there were three or four sinuses in front and behind, which discharged thin pus. It improved in appearance after this, and the surrounding inflammation disappeared: the sore began to cicatrise, and the sinuses filled up.

On January 3rd, 1850, all had healed, except a sore about the size of a shilling, which was slowly closing; and he went into the country for the benefit of his health.

Shortly after this boy left the hospital, his recovery became

complete, and within a twelvemonth his arm presented an appearance such as is represented in this figure.

There is a stiff elbow, as in the preceding case; and in most of the instances of re-section of this joint which have come under my observation, this has been the result. I have, however, seen all the usual movements at this joint after resection, as if there had neither been disease nor operation.

To those who are familiar with cases where resection of the elbow-joint has been performed, the above example will not represent anything very extraordinary in its appearance or history. For my own part, when I first saw the case, I at once made up my mind as to the course to be pursued. But the arm was repeatedly condemned to amputation before it came under my notice; and from this circumstance, as well as many others of a similar kind which have come to my knowledge, I am induced to give the case its present publicity, in hopes that it may contribute to that style of surgery which I have alluded to in the early part of this paper, and to which I have ventured from time to time to add my humble contributions. In addition, I had reason to know, that there were gentlemen present in the theatre at King's College Hospital, when the operation was performed, who did not hesitate to express an opinion that it was extravagant to suppose that such a proceeding could possibly be followed by any but the worst results. Doubtless such was also the opinion of those who had previously recommended amputation; and, as in the present day it would be unjust to suppose that any member of the Profession is ignorant; that in a vast number of instances of disease of the elbow-joint, amputation of the forearm may be avoided by the judicious performance of resection of this articulation, I presume it is only because of the seeming magnitude of the disease, as represented in *Fig.* 3, that such a case was or would be thought unfit for this mode of treatment. I can only imagine, that the parties coming to such a conclusion, although familiar with the fact that excision of the elbow-joint may be performed, are not equally familiar with the disadvantageous circumstances under which it may be resorted to with a fair prospect of success. I may now admit, however, that in my own early days of practice, I have repeatedly performed amputation under similar circumstances; but then resection was comparatively new; and twenty-five years, exclusive of the earlier knowledge which all of us have of the doings of the Moreaus, and of Park, in such cases, ought to have made us much more familiar with the subject. That such an improvement in knowledge is in reality the case there can be no doubt, but the observations above made will show that possibly amputation may yet be performed when excision would suffice. I am the more induced thus to allude to this subject, as I perceive, from the tone of some of the many excellent Hospital Reports which appear in our weekly medical journals, that excision of the elbow-joint is referred to, when such cases are reported, as if it were a novelty, and resection, an operation still upon trial; whereas, in certain cases, and especially in the elbow, there is really no operation in surgery, of any importance, whose character may be considered more thoroughly established.

It is now so long since I left Edinburgh, that I must refer with diffidence to what may be the state of surgery there at present; I presume that I may, however, without offence to any one, express my opinion, that, in so far as I have had opportunity of judging, resections have been less practised in London than they might have been. As an old pupil of the Edinburgh School, I have some gratification in referring to my Alma Mater as having given a great example and impulse to what I sincerely believe to be a vast step in surgery in the right direction; and for this advantage, (without meaning to detract from the great merit of Moreau, Park, Jeffray, Roux, and Crampton,) I believe that Mr. Syme, of Edinburgh, is justly entitled to the chief credit.

If, by these examples of my own, selected from a large field of observation which I have myself had the rare advantage to enjoy, I shall contribute to the advancement of "Conservative Surgery," I shall deem myself amply rewarded for the devotion of a little spare time to a subject in which, from the earliest period of my studies in surgery, I have always felt deeply interested.

OBSERVATIONS ON ARTIFICIAL PUPIL:

WITH A DESCRIPTION OF A NEW METHOD OF OPERATING IN CERTAIN CASES.

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That delicate operation by which the surgeon opens a way for the light to the retina, when injury or disease has obstructed the natural aperture, must always be regarded with peculiar interest; for not only is it usually employed as a last resource upon a sole surviving eye already seriously damaged, but the singular variety of circumstances to which it may have to be adapted, not less than the numerous contrivances and modes of operating which have been devised in consequence, appear to give the operator much liberty of selection, and thus throw upon him a heavier responsibility. A young surgeon, with limited experience, may well be perplexed by the long and sometimes prolix accounts to be found in systematic works of the operations practised by various writers, and feel quite at a loss as to the course he should pursue in a case even of a common kind. The increased intelligence of the members of our Profession leads them more extensively than formerly to undertake the more critical operations, even those which are not urgent through present danger to life, but only by the importance of their result to the patient's future comfort or support. And, considering how momentous a thing it is to the patient submitted, probably, for the first and last time to a chance of sight, that the operation undertaken should be of the best adapted kind, and performed in the best fashion, any observations calculated, ever so little, to further these ends, can hardly be deemed superfluous.

In the remarks I am about to offer, I shall be guided chiefly by what I have seen in the cases operated on by myself. Of these I have preserved notes of about a dozen only, out of which it will be sufficient for me to insert the details of such as present any points of practical interest, or illustrate the principles which, in my opinion, ought to guide the operator. I shall endeavour to show how some of these operations might have been decidedly improved, had I been at the time in possession of the instruments now at our command, or had I then had the experience which these and other cases have since imparted. I have no wish to discuss the whole subject of artificial pupil, but only to touch upon some points of practice. By artificial pupil, in this paper, is meant not only the formation of a new pupil, but a displacement or enlargement of the natural pupil, by the art of the surgeon. To distinguish these latter under a different name, seems an unnecessary and troublesome refinement of language.

CASES FOR ARTIFICIAL PUPIL.

1. No operation is applicable, where the retina is not sensitive to light; and whether it be so or not, can be ascertained by making the light of the sun, or of a candle, fall suddenly on the eye. If the retina retain any sensibility to light, the patient will be aware of it, even though the rays should fall only on the sclerotica. For I doubt if the pigment of the human choroid, even when darkest, is ever sufficiently opaque to completely arrest the stream of light sent towards the retina through the sclerotica. Certainly a leucoma, a closed iris, and a non-osseous cataract behind, all put together, are not enough to wholly intercept

the light, if it fall on the front of the eye. Light will still be distinguished from darkness if any sensibility remains in the retina. Hence it would be a mistake to operate for artificial pupil, if the patient, on such a trial, detected no light; and this notwithstanding some cases long since published, but contradictory to the general experience.

2. No operation is applicable where the original cornea has been totally destroyed, and replaced by organised lymph deposited on the front of the iris, with or without staphylomatous bulge. This may seem self-evident; yet the caution is not unnecessary, for I have seen, not one, but several patients sent to the hospital, under the notion that an artificial pupil might be made, when in fact the front of the globe was formed by an ancient cicatrix in the place of a sloughed cornea, the iris wholly adherent to the back of the cicatrix, and even the anterior part of the sclerotica slightly distended and attenuated. In some such instances the cicatrix, as well as the front of the sclerotica is here and there semi-transparent, and the pigment is visible through it. It has the appearance of being sufficiently clear to allow of some useful sight, if only the pigment were removed. Doubt may even sometimes seem to exist whether the iris is actually adherent to the cicatrix; an aqueous chamber, however small, may be guessed at, and the retina being evidently sensitive, the surgeon may be induced to make an attempt at an artificial pupil, and to raise hopes which must lead to disappointment. In some of these cases, the ciliary ligament may be observed as an opaque, white, circular line, between the corneal and sclerotic region, which may serve to assure the surgeon that, at least, he need not try to make the pupil behind this line, even though some temptingly transparent point should present itself.

3. If, on the contrary, there is evidence of any degree of sensibility of the retina; and if the cornea is clear enough at any one point to enable the surgeon to see any of the parts that lie behind it, he may fairly attempt to make an artificial pupil, provided it be otherwise indicated.

There are several preliminary questions which have received deserved attention from practical men, yet still remain more or less undecided, such as the advisability of operating on one eye while the other continues sound; whether both eyes should be operated on, supposing both have obstructed pupils; the course to be adopted under strabismus and other complications, &c. Into these it is not my intention at all to enter in the present brief paper, which relates to the rules and principles which should guide the surgeon in operating, supposing it to be determined to make some attempt to improve vision by this means in an eye of which the pupil is closed or obstructed.

The first cases to which I shall refer may all be classed together as those in which at least that portion of the cornea is opaque which lies in front of the pupil, so that the entrance of light is impeded by a central opacity of the cornea. Under this head, we may include cases in which the pupillary border of the iris is free, and those in which it adheres, in whole or in part, to the opaque cornea; cases in which the lens and its capsule are clear or opaque; as well as cases where these several conditions are variously combined. My own experience leads me to believe, that the partial adhesion or non-adhesion of the iris to the back of a leucoma, and the partial, or even total, obliteration of the pupil by such adhesions, are circumstances exceedingly unimportant in regard to the operation to be selected or its result. If the aqueous humour be natural in quality, and not serous, and if the iris retain, as it commonly does, its faculty of contraction, such cases may be operated on with almost perfect safety as regards inflammatory consequences, and according to the same general method; for notwithstanding the attenuation which the iris undergoes in the course of years, when the whole pupillary margin is permanently fixed by adhesions, this membrane does not seem to be thereby rendered more prone to inflammation. I also believe, that in the large majority of the cases now spoken of, originating, as they usually have done, in acute inflammation, advancing to ulceration or sloughing of the cornea, and involving the deeper parts, the iris and lens, only in a secondary, and as it were mechanical, manner, the iris long retains its healthy texture, and the lens its transparency. If it happen that the lens has fallen against the cornea on the escape of the aqueous humour, and become adherent (which is comparatively rare), then the point of its capsule touched, and that point only or chiefly, becomes opaque, while the rest of the capsule and all the body of the lens usually remains pellucid. This, at least, is the general result of the cases which I have had an opportunity of observing in London.

The central opacity of the cornea now alluded to may be leucomatous or nebulous, that is, dense or faint; for the chief destruction of the corneal substance replaced by the leucoma may have been a little on one side of or below the centre, and the exact centre may have nearly recovered itself after being only infiltrated with lymph. Again, the pupil may be partly obscured by a leucoma, partly by a nebula bordering on the denser opacity. These are circumstances very important to be considered in individual cases; but as they vary infinitely, it will be desirable to establish, if possible, certain principles to aid the judgment of the surgeon meditating an operation.

In another set of cases, to which an operation for artificial pupil is applicable, the cornea is clear, and the pupil, reduced to a very small size, is adherent by its margin to the capsule of the lens, which is opaque within the pupillary area, as a consequence of iritis. Not unfrequently a small part of the margin is free; at other times it is wholly adherent. In these cases the iris is usually altered in texture, and easily lacerable. Its adhesion to the capsule is tough, but its own tissue is readily torn by an instrument. I believe it will be generally found, that the body of the lens retains its transparency, and the capsule remains perfectly clear, except within the area of the pupil. Of this, some examples will be given. This constitutes a very strong argument for rejecting Mr. Tyrrell's operation of drilling (*i. e.*, of gradually destroying the lens by repeated and cautious "needling" through the pupil), and for attempting the formation of an artificial pupil, with the maintenance of the lens, as in cases 1, 4, and 9.

Among the cases of central leucoma, some occur in which not merely the centre, but all except some small marginal part of the cornea is densely opaque; and here the surgeon has no option. He must make or draw the pupil behind the clear spot. Even should such a remaining spot not be perfectly clear, if it be sufficiently so for the surgeon himself to see any of the deeper parts (the iris or an opaque lens) through it, he may rightly proceed to operate under the same restriction.

In other instances, and I may, indeed, say in most, he is not thus limited, but is at liberty to choose between one part or another of the circumference or intermediate region, and in several he has a very large discretion, and has to consider such questions as the following:—Shall I make the pupil on the inner or the outer side, above or below? Shall I make it large or small? Should it be close to the central leucoma, even if the cornea is somewhat nebulous there? or should it be enlarged up to the very border of the cornea, where, perhaps, that membrane is quite clear? Some of these points have been well discussed by writers, though much difference of opinion remains. Others of them do not appear to have been at all fully considered.

Passing over the question as to which may be the best side (inner, outer, upper, lower) for the artificial pupil, *where choice exists*, let me confine myself to the latter questions, as to its distance from the centre of the cornea, and as to its size and shape.

1. *Importance of a Central Position for the Pupil.*—Though the rule is laid down by more than one author, that it is better to make the pupil near the centre of the cornea, the great importance of this rule seems hardly to have been recognised, nor the grounds fully explained. Surgeons have not, perhaps, expected enough from their operations for artificial pupil, and have been too easily content if their patients obtained vision merely of large objects, when, by greater skill in their operations, they might often have enabled them to read. So important do I regard a central position, that I would rather make a pupil near the centre, behind a portion of the cornea *somewhat nebulous*, than at the margin, behind a part perfectly clear. And, as it very frequently happens that this alternative presents itself in practice, it is desirable to draw attention to it, and to ascertain the best course to pursue.

The nearly central position of the natural pupil itself suggests the reasonableness of this rule. In fact, (1.) the more central the pupil, the more nearly do the rays traverse the central region of the crystalline lens, supposing it to exist, (and it is the surgeon's duty always to suppose it present and transparent, unless the contrary is evident,) and the more correctly do they come to a focus on the retina. (2.) The more central the pupil, the more likely are the rays en-

tering by it to fall on the central region of the retina, about the yellow spot, the seat of most perfect sight. Whereas, (3.) in proportion as the pupil is made towards the margin of the cornea, these conditions are less and less fulfilled, and vision (though the same amount of light may penetrate) must be proportionally indistinct.

A slight reference to the relative anatomy of the cornea, iris, and lens, will show how unlikely it is that a fair image should result from a pencil of rays traversing a pupil made at the great or ciliary circumference of the iris. Behind the great circumference of the iris lies the circle of ciliary processes, with their tips bordering upon, and often irregularly overlapping, the margin of the lens. If they do not overlap the lens, the vitreous body lies in the interspace. In either case, rays of light entering by a pupil at the border of the cornea, must partly strike the ciliary processes; or, if within these, must pass to the retina by the side of, or through the margin of, the crystalline lens. So that not only would they probably fall on a feeble part of the nervous sheet, but they could hardly be brought to a correct focus even there.

2. *As to the Size of the Pupil.*—For the finer purposes of vision, supposing the surgeon has the option of making a pupil near the axis of the eye, it is important that the opening be *not too large*. A small pupil near the axis of the crystalline will be much more efficacious than a larger one which extends so far from the axis as to admit a part of the rays through the edge of the lens; and this will be more the case, if, as usually happens, the base or wider part of the new pupil be outwards, towards the border of the lens, and its narrower part inwards, towards its axis. If the pupil be unavoidably narrower at one part, that part should be, if possible, towards the margin of the lens. If the central part of the cornea be only nebulous, and *so allow of some, though imperfect vision*, it will be of trifling avail to enlarge the pupil up to the margin where the cornea may be clearer. For the largeness of its size and its partial malposition will counteract any benefit derivable from the arrival of the light through a clearer medium. This will be illustrated in cases 2, 5, 6. I shall propose a mode of slightly enlarging the pupil in such cases, while its central position is maintained.

3. *As to Shape.*—This is of less consequence than position and size. But it may be remarked, that a large orifice, if narrow and much elongated, and if it take the direction of a radius in front of the lens, allows of better sight than a circular pupil of the same area. In fact, I have found a long, narrow, elliptical slit, extending from the situation of the natural pupil to the very border of the lens, sufficient to permit almost perfect vision. This is an example, as it occurs in my case book.

Case 1.—22nd July, 1847. Thomas Richards, aged 37, horse-keeper. Six years ago dimness of sight came on. Three years ago he had inflammation in both eyes, apparently syphilitic iritis. *Now*, the left is without perception of light, with synechia of the whole border of the contracted pupil. The capsule is partially opaque. The right eye has also the pupil contracted to almost a point, and adherent to the capsule of the lens, except for about 1-20th of an inch at its upper part. He sees very imperfectly, for the capsule of the lens is opaque within the area of the pupil. It is, however, quite clear opposite the unadherent part of the pupillary border. Under atropine the pupil dilates very slightly at this point, and he then sees better.

28th.—After atropine applied, I punctured the cornea with a cutting needle at the border above and a little to the outer side, and with Tyrrell's hook caught the free border and pulled it out. A thin strip of iris tore in a direction from the pupil towards the seat of puncture; that is, very nearly in the direction of the fibres. No hæmorrhage.

August 2.—Sees very much better. Present state of the pupil.(a)

(a) This and the three following figures have been accidentally reversed in being transferred to the wood, so that they seem to belong to the opposite eye. *a*, first state; *b*, the pupil under atropine; *p*, site of puncture of cornea; *c*, the artificial pupil.

9th.—Can see to read the newspaper very well, even the small type. No pain in the eye. The capsule and lens opposite the new pupil are perfectly clear. Possibly the pupil might be still more enlarged by dragging the lower border; but "let well alone." Possibly he might see worse with a larger pupil, and the lens might not escape opacity a second time. Dismissed.

The surgeon's object, then, in those cases where choice is allowed, being to keep the artificial pupil as central as possible, and of moderate size, we may proceed to some general rules which should influence his selection of one kind of operation rather than another, as well as enable him to perform that which he selects in the best manner.

1. It is an important general rule, which requires to be insisted on, that that operation is the best which, while it accomplishes most completely the optical objects required, inflicts the least possible injury on the structures of the eye. This rule should, in my opinion, determine the surgeon against that violent and painful, as well as uncertain and hazardous operation, called coredialysis, *i.e.*, the tearing away the iris from its ciliary attachment, so as to open a way for the admission of light. Not only is the resulting pupil too large, and its wide part in the wrong direction, close to the border of the cornea, in front of the ciliary processes, and the edge of the lens, and thus optically objectionable; but the operation lacerates the nerves and vessels entering the iris, is attended with hæmorrhage and sickness, and much danger of subsequent inflammation. I hope it will be altogether discarded from practice.

This rule also indicates that the operation should be performed through the cornea rather than through the sclerotica. In the former way the cornea and the iris only are interfered with; in the latter, the sclerotica, the choroid, the vitreous humour, and the lens where it exists. The risk of hæmorrhage and subsequent inflammation are thus much less in the corneal operation.

It also implies the importance of performing the operation by a very small wound,—by a puncture rather than an incision, and certainly rather than by the recent method of Guepin, who punches out a circular piece of the cornea, making a hole into which the iris may prolapse, requiring subsequent cauterization with the nitrate of silver.(b)

2. It is desirable that the wound should be so made in the cornea that the opacity it may leave shall not afterwards interfere with the passage of light to the new pupil. To avoid this opacity some surgeons have preferred the operation by the sclerotica; and when the alternative appeared to lie between risking a nebula in front of the new pupil, and the possible inconveniences of perforating the sclerotica and choroid, perhaps it was well to prefer the latter. It was also well to prefer the latter, when the modes of operating through the cornea too often (as with Maunoir's scissors) imposed the necessity of a large incision in that part, and therefore involved the chance of an extensive opacity. But as I hope it can be shown, that either the corneal wound need not be made close to the new pupil, or, if close, that a mere puncture will accomplish all that is desired, the alternative disappears, and the corneal operation may in most, if not all instances, be preferred.

3. It is also important, in a procedure of so much nicety, that the eye should be at the perfect command of the surgeon, and that he should continue to see clearly every step until the whole is completed. Where the patient has not perfect self-command, chloroform acts admirably, and is better than forceps or hooks for maintaining the steadiness of the globe. As to the last clause, it implies the great importance of preventing the escape of the aqueous humour while the necessary manipulations on the iris are in progress. This will be explained further down.

PARTICULAR OPERATIONS FOR ARTIFICIAL PUPIL.

Keeping in view these rules, we may advance to the consideration of the particular operations employed. I shall only here advert to such as seem most advisable, and point out how they may be modified so as best to accord with the principles laid down.

The operation almost exclusively practised at present in

(b) See Desmarres, Mal. des Yeux, p.470.

cases of corneal opacity, at the Moorfields Hospital, where more than 11,000 patients are annually treated, is that of excision, as modified by the late surgeon of this hospital, Mr. Tyrrell. I shall briefly describe that operation, and then venture to speak of its merits and defects, and how it may be usefully adapted to the cases to which it may seem to be still applicable.

It consists in first puncturing the margin of the cornea with a broad cutting needle at the point, towards which the artificial pupil is to be drawn. If the original pupil is quite obliterated by adhesion to the cornea, the needle is pushed onwards in the aqueous chamber so as to pierce the iris close to the cornea. The needle being withdrawn, the small blunt hook, known as Tyrrell's hook, is introduced, seizes the margin of the pupil if it exist, (or the margin of the aperture in the iris just made by the needle,) and being semi-rotated on its axis, draws it out through the corneal wound. The prolapsed iris is then cut off with scissors.

The advantages of this operation are great. It inflicts very little injury on the eye, and is very seldom followed by any serious inflammation. The corneal puncture may be always made so small and so near to the sclerotica, as not to leave a nebula prejudicial to vision. And, *if the iris remains entangled in the corneal wound*, and becomes adherent to it, the pupil is often of moderate size, and either elliptical or triangular, with its apex at the margin of the cornea. In such cases vision is often rendered very good. The lens, also, need never be damaged blunt and made cataractous by the hook,—a most important circumstance.

This operation, however, seems to me to be liable to serious disadvantages, among which are the following:—The aqueous humour generally escapes before the critical period when the iris is seized by the hook, and thus the procedure may be interrupted or fail. This escape occurs always to some extent when the needle is withdrawn. It occurs also, and to a greater extent, the instant the hook is introduced, for the stem of the hook does not fill up the corneal wound, and unless the operator is very prompt and dexterous, the whole of the humour is pretty sure to run off before he has seized the pupillary margin. The iris then comes in contact with the cornea, probably wraps over the hook and conceals it from view, making the seizure of the iris at the right point somewhat of guesswork. Another disadvantage is the large and irregular pupil apt to result if the iris should slip back through the corneal wound. I have been told, that in Mr. Tyrrell's own cases the iris frequently failed to become adherent to the corneal puncture, and I think that no operator can at all insure the iris remaining entangled in it after the operation is over. Hence the object is marred. For Tyrrell's hook having its recurved portion an eighth of an inch long, seizes a large extent of the iris, and this quantity is increased by the twist given by the half turn which is required in order to withdraw the instrument adroitly through the cornea. The iris, when drawn out, is puckered and folded at the wound through which it passes, and, as has been said, forms the apex of the new pupil, if it remains fixed in the in the cornea. But if it recedes from this wound, after a portion has been cut off by the scissors, the folds at once open out widely in the aqueous chamber, giving a jagged margin to the pupil, which then becomes much too large, and its widest part often towards the ciliary border exposing the ciliary processes, or at least the margin of the lens. If the prolapsed iris have not been removed by the scissors, and it recede, of course the eye returns to the condition it was in before the operation. The two following cases illustrate some of these remarks:—

Case 2.—Benjamin Hummerston, aged 26, was admitted on the 2nd of April, 1849. Left eye lost after small-pox in childhood. Had severe inflammation in the right eye eight months ago. Vision was destroyed at first, but gradually recovered to a slight extent. He comes with a view to having an artificial pupil made. There is a leucoma covering the pupil, except when it is dilated, by shading the eye; its outer edge then appears, and improves his sight a little. (*Fig.* 2 *a.*) In the centre of the leucoma is a dark speck, where the iris had prolapsed, and where the pupillary margin is now partially adherent. I enlarged the pupil outwards, with Tyrrell's hook, in the usual way, and snipped off the protruding iris. The iris almost immediately became disengaged from the corneal puncture, and opened out, as seen at *b*.

No pain or inflammation ensued. Three days afterwards, the irregularities of the margin had smoothed down, the pupil remaining much too large (c). His vision was very imperfect, though improved a little. He could not distinguish objects at a distance of two yards, but could see large letters when held very near the eye. On the 27th of April he returned to the country, but little improved. The pupil was still larger than before. (*Fig.* 2 *d.*)

He returned on the 8th of April, 1850. Sight was too imperfect to work with. I found that he could see much more clearly by placing before the pupil an opaque plate, perforated by a pin-hole, or, still better, by a horizontal narrow slit. He could then see faces, and even read large type,—thus proving how much better a smaller pupil would have been. I ordered a slit plate for him from Hawes.

June 25.—The plate is of much use, both in-doors and out: it, however, strains the eye, if used long at once. No inflammation. Health very good.

April, 1851.—Amendment continued till three months ago, when he had pain, and shining, moving appearances lasting a month, and recurring even now. Sight is much impaired. The aqueous is turbid, and the lens is seen opaque and moving behind the pupil. On July 22nd, the eye was sufficiently recovered to allow of the needle being used to the lens. On Nov. 25, the lens was quite absorbed, but a web of capsule stretched across the pupil, one band especially across the centre of it. I introduced Luer's scissors on the upper and inner side, and, bringing their blades up to the pupil, cut across this band at each end, so as to clear the central part of the pupil. No inflammation followed. He was afterwards able to see better, but not so well as before the cataract formed. It is probable that the retina and vitreous are diseased.

[To be concluded in our next.]

ON THE TREATMENT OF POLYPI OF THE EAR.

By JOSEPH TOYNBEE, Esq., F.R.S.,

Fellow of the Royal College of Surgeons of England, Aural Surgeon to St. Mary's Hospital, and Consulting Surgeon to St. George's and St. James's General Dispensary.

Polypoid excrescences are not uncommonly met with in the external meatus, and they are generally the result of long-continued irritation of its dermoid layer. As a general rule, polypi of the ear are attached to the membranous meatus, although cases are sometimes met with in which they spring from the outer surface of the membrana tympani, and in one dissection I found a polypus growing from the inner surface of the latter organ. Polypi are always attended by an abundant discharge of mucous fluid, which often has so offensive an odour, that the patient is obliged, as much as possible, to avoid society. This affection is generally attended by very little uneasiness in the ear. At times there is a sensation of fullness and pressure; but one of the most prominent and urgent symptoms is a sense of heaviness, which is very frequently accompanied by giddiness, and a feeling of confusion in the head; and sometimes there is a shooting pain, which extends from the ear to the temple. These head symptoms, which are often very distressing to the patient and alarming to his friends, appear to be produced by the pressure exercised by the polypus on the outer surface of the membrana tympani. This pressure on the outer extremity of the chain of tympanic ossicles produces a movement inwards towards the vestibule of the inner extremity; for upon careful examination of a specimen prepared for the purpose, it is manifest that, although there are two articulations between the long process of the malleus and the base of the stapes, the slightest movement of the pro-

cessus longus mallei inwards causes the base of the stapes to be pressed inwards towards the cavity of the vestibule. After the observation of many cases in which head symptoms have been associated with affections of the ear, I have come to the conclusion, that pressure upon the contents of the vestibule may produce—1. A sensation of noises; 2. A feeling of giddiness; 3. Confusion of ideas. That these symptoms are produced by pressure on the contents of the vestibule, may be ascertained from the examination of cases in which collections of cerumen occur in the external meatus; for not unfrequently the medical man meets with instances in which continued noises and giddiness are present to so great an extent, that the patient is often obliged to stop when walking, and hold himself by the nearest object; and these symptoms wholly vanish immediately that the accumulation is withdrawn from the outer surface of the membrana tympani.

A careful examination of the ear by means of a speculum and a strong light, is at once sufficient to determine whether a polypus is present, premising that the ear has been carefully syringed with warm water so as to remove all discharge.

Polypi of the external meatus may be divided into three classes:—

1. The one of most frequent occurrence, and which may be called the vascular polypus.

2. That which has been termed the gelatinous polypus.

3. One that has not hitherto attracted the attention of surgeons, and which may be styled the globular vascular polypus.

1. The vascular polypus is of a red colour, plentifully supplied by vessels, and so soft that, upon being taken hold of by a pair of dressing forceps, it breaks up and blood escapes from the lacerated surface. The vascular polypus rarely increases to so large a size as to dilate the meatus; it generally grows from the wall of the meatus, about midway between its outer orifice and the attachment of the membrana tympani. It is composed of small rounded cells, and its surface, which is sometimes covered by ciliated epithelium, is very smooth and shining. This polypus rarely extends further than the orifice of the meatus, where it can often be seen without the use of any artificial means; frequently it is confined to the inner half or two-thirds of the meatus. It is not uncommon for the vascular polypus to remain during several years throwing off its offensive secretion, without producing symptoms of a nature sufficiently urgent to induce the patient to apply for relief; in other cases, the head symptoms soon become so distressing as to cause serious alarm.

The treatment generally adopted of applying astringent lotions and drops, or of touching the surface of the polypus with the solid nitrate of silver, has, in my hands, been quite useless; and so far as my experience has extended, all attempts at extraction fail, because the polypus breaks up immediately that any force is applied to it, and it again rapidly grows to its former size. After having been long baffled in the treatment of vascular polypus, and having tried by a great diversity of applications to cause its disappearance, I resorted to the use of the potassa cum calce, and thus far my success with it has been sufficiently great to induce me to recommend its use to the Profession. I will proceed to describe the mode in which it has been applied. In the first place, it is important that the substance used should be made into very thin sticks; those supplied to me by Mr. Squire as recommended in a paper by Dr. Henry Bennett, answer the purpose extremely well, so long as they retain their size and form; but, as this substance deliquesces very rapidly, it is important that the greatest care be taken to keep it excluded from the air. For use at St. Mary's Hospital, the potassa cum calce has been supplied by Bailey, of Wolverhampton; (a) and it differs from that I had previously used in containing a small quantity of iron, which addition makes it firmer and harder, and it deliquesces much less rapidly than when prepared in the usual way. Perhaps the latter preparation, in not requiring so much care in its application is to be prepared for hands unaccustomed to its use; but the one supplied by Mr. Squire is certainly the most efficacious.

In the application of the potassa cum calce care is requisite so as to avoid touching the surface of the meatus; it is so extremely sensitive, that the pain produced by the action of an escharotic upon it is very acute. The polypus, on the contrary, possesses little or no sensibility; if, therefore, the application be carefully made, the operation is not attended by any pain. The mode of proceeding which I am in the habit of pursuing, is as follows:—The external meatus having been syringed with tepid water, so as to remove the whole of the discharge from the surface of the polypus as well as from that of the meatus, the tube and polypus should be dried by a portion of fine cotton wool attached to the end of a probe. A portion of glass tube, about an inch and a half long, should then be selected, and care ought to be taken that it is so embraced by the meatus, that it is not liable to be shifted from its position by any movement of the head of the patient.(a) This portion of glass tube is to be introduced into the meatus, and passed inwards as far as the polypus, when, by a gentle pressure, a portion of the free extremity of the polypus is made to protrude into the interior of the tube, and is surrounded by it. Upon looking into the tube, and ascertaining that the polypus is embraced by its inner extremity, the tube is steadied by the left hand, and with the right a portion of the potassa cum calce is passed inwards, and gently pressed against the polypus. If a pair of rectangular forceps (b), be used neither the hand of the surgeon nor the instrument he employs, prevents the operator from seeing the polypus while he is making the application, and he can, therefore, be sure that he touches the whole of that part of the growth which is in the tube.(c) The immediate effect of the application of the potassa cum calce upon the surface of the polypus, is to change its colour from a bright red to a livid hue; and this takes place without any pain being experienced by the patient, if the meatus has been completely guarded. After the application has been made, the patient should sit still for three or four minutes, and the tube allowed to remain as it was fixed during the operation. Upon inspecting the polypus at the end of these minutes, it will be found to have changed to a dark purple colour, to have blood oozing from it, and, instead of its former rounded extremity, it presents an uneven, pulpy mass. The meatus is now to be syringed out with tepid water, when blood, mixed with the *débris* of the polypus, will come away; the surface of the polypus still remains of a dark colour, and, during several hours, a process of slow dissolution takes place in all that portion which the escharotic has reached. There are two other directions that it is important to bear in mind. 1. The surface of the polypus is sometimes rendered so dry by means of the cotton-wool, that there is not sufficient moisture to cause the escharotic (especially when containing iron) to deliquesce; the point of the potassa cum calce is, under these circumstances, to be slightly moistened. 2. Should the patient experience pain at the time of the application, or during the few minutes afterwards, the ear should immediately be syringed with tepid water,—the effect of which is at once to remove all painful symptoms, and to arrest the action of the escharotic.

[To be continued.]

(a) The large sticks sent by Bailey were re-cast into smaller ones by Messrs. Hopkin and Williams, of New Cavendish street.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

GUY'S HOSPITAL.

By F. W. PAVY, Esq.,
Clinical Clerk.

ABSCESS OF THE LIVER CONSECUTIVE TO DYSENTERY.

The following particulars refer to a case falling under the above denomination which has recently occurred in the male clinical ward of this hospital. It is a case which has been throughout replete with interest and instruction, as well from the rarity of acute hepatic abscess in our civil hospitals of this country, as from the obscurity of the physical signs at first presented on the right side of the patient's chest. In Dr. Budd's able and complete

(a) It is perhaps scarcely necessary for me to repeat here, that when possible, oval-shaped, instead of round tubes, ought to be used for insertion into the outer ear.

(b) These are made by Weiss.

(c) In the uncertain atmosphere of London, I use Mr. Avery's lamp, held between the teeth, and thus leave both hands at liberty; but a good sun light, or even the bright light of a fine day, is quite sufficient.

Treatise on the Diseases of the Liver, the frequent connexion of dysenteric ulceration of the large intestine with abscess of the liver, is satisfactorily demonstrated. According to his views, which the following case confirms and supports, they stand in the relation to each other of cause and effect; or in other words, the abscess of the liver is secondary to the ulceration of the intestine; just the same as a suppurating bubo in the groin is secondary to an irritable sore on the shin or an injury to the foot. The knowledge of this fact formed a most important diagnostic indication in the case under consideration. It supplied a link to the chain of evidence which enabled the physician to pronounce with comparative certainty the precise nature of the patient's malady. Looking at the man's aspect, and judging from his symptoms, it was sufficiently obvious to every one, that he was labouring under suppurative fever. The tumour of the belly indicated the seat of morbid action, and pointed to an abscess or a suppurating hydatid cyst of the liver as the nature of the complaint; but the fact of his being affected with dysentery turned the scale of evidence decidedly in favour of the former of the two diseases. Little or no doubt indeed was entertained then, that an autoptical examination would disclose a large abscess, of a recent and acute kind, connected with the liver. But the nature of the physical signs, audible on his admission into the clinical ward, rendered the condition of the right chest a subject involved in much obscurity; and the question seemed resolved into whether there were independent disease in the chest, or whether, as was thought the more probable supposition of the two, the lesion in the thoracic cavity were the result of the extension of disease from the abdomen. As time advanced, however, day after day doubts and uncertainties were removed, and the latter hypothesis became pretty generally believed to be the true explanation of the course of events. Indeed, his expectoration was daily inquiringly examined, under the anticipation of the abscess opening into a bronchial tube, if he survived long enough to admit of this salutary effort of nature being accomplished. The *post-mortem* examination, it will be seen, justified and confirmed this supposition to the fullest extent; for the lower part of the right lung was found extensively involved in the suppurative process, the abscess having extended itself by inflammatory softening through the diaphragm into the pulmonary tissue, where it was defined by its ordinary boundary or cyst. Another large abscess was discovered at the autopsy, and was connected with the inferior surface of the liver, extending downwards in front of the kidney and behind the ascending colon to the cœcum, from the cavity of which it was separated by an exceedingly thin septum of mucous tissue. Both these abscesses, then, showed an evident and designable disposition to open into a mucous tract; in the one case the bronchial tubes, in the other the intestinal canal; and probably would have done so, had the patient longer survived. The substance of the following particulars I have taken from the exceedingly accurate and well-drawn-up report of Mr. C. White.

Henry George, aged 27, an unmarried man, residing in Bermondsey, and occupied for the last eight years as a corn lighterman; previous to this, made a voyage to Trinidad, in the capacity of sailor, where he remained for two months, which, with a short voyage in the coasting trade, comprises the whole of his employment as a seaman. His recent occupation being a laborious one, has been accustomed to drink freely of beer, beer and gin, and gin alone; but says that he has not often become intoxicated. Has always enjoyed excellent health, never having had, according to his own statement, anything to take him off his legs since he was born, except a bilious fever when he was nine years old. About six weeks ago a sack of wheat fell on his right shoulder, but did not injure him so as to interfere with his working. Three weeks since, or probably earlier than this, according to information from other sources, he was taken with considerable purging of blood and slime, which has continued up to the present time, frequently passing six or seven stools during the day. A fortnight ago he was seized with pain in the right side, extending to the right shoulder, which he attributed to the accident he received a month previously. His urine at this time was very high coloured, and he was told by the medical man to whom he had applied for advice, that he was suffering from liver disease. A day or two afterwards he was seized with shivering, succeeded by profuse perspiration, and from that time till the present, these attacks of rigors have persisted, sometimes recurring twice during the day. Has had loss of appetite, but no vomiting except after taking medicine. Has been sometimes light-headed and inclined to delirium. The day before his admission his skin became slightly jaundiced.

He was received into the hospital, October 15, 1851, under the care of Dr. Hughes, presenting the following symptoms:—Skin hot, and sweating profusely; tongue coated with a yellowish fur; pulse 96; a bulging and enlargement of the right side; right chest dull on percussion, respiratory murmur absent over the lower part; tactile vibration also absent; no friction or other abnormal stethoscopic sound audible. The left chest normally resonant, and its respiratory sounds perfectly natural. The liver can be felt projecting downwards below the ribs.

On the 22nd he was transferred into the clinical ward, under Dr. Addison, when the condition he presented was as follows:—

A short, muscular-built man, with a dull, heavy expression, and a hectic flush on both cheeks. Answers questions slowly and somewhat confusedly,—his remembrance being bad and, in some instances, faulty. Skin hot and dry, but complains of profuse perspirations at night after a rigor. Tongue moist, but coated with a white fur; pulse, 96. Complains of pain in the right side on taking a deep inspiration, or on pressure being made below the ribs. Configuration of chest unnatural, the lower part bulging out on both sides, from the fourth rib downwards; but there is no apparent difference between the two sides. The physical signs are—dulness on percussion, both anteriorly and posteriorly, over the whole of the right chest; absence of respiratory murmur over nearly the same extent; the part situated over the apex of the lung forming the exception: a distinct rub, or *frottement*, between the third and fifth ribs, and a small gurgling over the position of the sixth rib on the right side The auscultatory sounds of the left chest normal. Has considerable pain on pressure over the hepatic region, and palpation gives distinct evidence of a resisting substance, projecting much below the ribs, and extending past the median line towards the left side. Ordered

℞. Ant. pot. tart. gr. ¼.; P. opii, gr. ss.; hydr. chlor. gr. j. Fiat pilula cum sacchari farce, et omni quartâ horâ sumatur.

Oct. 23rd.—Had a severe rigor, succeeded by sweating, about the middle of the night. His purging continues, his motions being of a watery consistence, and containing dark green and blackish particles floating on the surface. Urine high-coloured, having a strongly acid re-action, and not albuminous. Hydr. chlor. omittatur, et detur haustus effervescens potassæ carbonatis cum limonum succo, quartis horis.

25th.—Pulse 96, soft and compressible. The rigors at night persist; tongue dry, and brown in the centre. The substance described as having been perceptible in the hepatic region, conveys the impression of a semi-elastic tumour, and resembles, in character, an abscess, or hydatid cyst, approaching the surface. The pleuritic friction-sound still audible in the same position. Expectoration slightly tinged with blood.

27th.—Has become greatly emaciated during the last few days. The doughy, fluctuating feel has considerably extended itself over the tumour on the right side, and the tumour itself is much larger. Expectoration much more copious, frothy, tinged with blood, and offensive to the smell.

28th.—Pulse 100, full, but compressible. Sweat profusely during the night, but had no rigor. Tactile vibration entirely lost over the right side of the chest, and the sounds, on deep inspiration, are very few and obscure. His right side, just below the ribs, measures one inch more than the left. Has had several loose stools since yesterday, consisting of yellow particles immersed in a watery fluid.

30th.—The abnormal sound that was heard over the third and fourth ribs appears somewhat larger in character, and resembles now a moist sound more than a rub. Expectoration more viscid, and mixed with less blood.

31st.—Fluctuation in the tumour distinct; the abdomen also gives evidence of containing fluid.

Nov. 1st.—Pulse hard and small (88). Tongue dry and brown; collection of sordes on the teeth; stools dark coloured, with blood floating on the surface. The patient perceptibly getting weaker and more emaciated. Has frequent and profuse perspirations in the day time as well as at night.

3rd.—Much worse; pulse 98. Right chest dull on percussion, both anteriorly and posteriorly; and the respiratory murmur entirely absent. An obscure fluid sound like a mucous râle, audible posteriorly. Mr Hilton being requested to see him, introduced an exploring needle into the tumour. A small quantity of a kind of serous fluid escaped, which, examined microscopically, presented amorphous particles, blood-discs, and a few pus globules. When the needle was removed a swelling began rapidly to form around the opening in the integument, from the escape of the contents of the tumour into the cellular tissue; but was controlled by broad strips of adhesive plaster placed around the abdomen.

4th.—Has been for some days past perceptibly getting worse, but is now evidently sinking. Pulse small and intermittent. Has frequent delirium, but when aroused and sensible, complains of pain on pressure over any part of his abdomen; and, during the night also, he frequently complained of pain in his belly.

8 p.m. expired.

Autopsy eighteen hours after death.—Left lung attached to

the walls of the chest by old adhesions; also some recent lymph in the pleural cavity. Right lung compressed to about one-fourth its ordinary size. The inferior lobe entirely adherent to the diaphragm, and, on endeavouring to separate it, a quantity of purulent matter escaped. The inner portion of the middle lobe, and a part of the lower, were found to form the upper boundary of a large abscess, proceeding from the abdomen. Heart somewhat large, with a slight deposit in the mitral valve. Abdominal parietes adherent over the region of the liver, by very recent adhesions: on attempting to separate them, the contents of a large abscess immediately escaped into the peritoneal cavity. This abscess was found to be five or six inches in diameter, to be connected with the front and upper surface of the liver, and to pass through the diaphragm, which was here converted into shreds of membrane, so softened, as to break with the slightest pressure. The upper boundary of the abscess was situated in the chest, and formed by thickened and contracted pulmonary tissue. On the under surface of the liver was another very extensive abscess, projecting downwards to the cœcum, between the colon and the kidney. The liver itself was hypertrophied, but that portion of its structure unimplicated with the abscess, was healthy. The kidneys were also healthy in structure, but hypertrophied. Peyer's patches and the solitary glands on the lower part of the ileum were enlarged, and the mucous membrane injected. The cœcum, in the act of removal, was broken down in two places; corresponding to which, were two sloughing ulcers, the size of a walnut. Besides these, there were other smaller ulcers about the cœcum. The whole surface of the colon from the cœcum to the sigmoid flexure was studded with numerous ulcers of various sizes, from a pea to a bean.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

ROYAL BERKSHIRE HOSPITAL.

By F. A. BULLEY, Esq., F.R.C.S.

Surgeon to the Hospital.

STONE IN THE BLADDER.—ABSENCE OF SOME OF THE ORDINARY SYMPTOMS.—OPERATION.—LIMITED DIVISION OF THE PROSTATE GLAND.—RECOVERY.

William Emans, aged 37, a labouring man, from the country, was admitted October 28th, 1851, with many of the ordinary symptoms of stone in the bladder. He had never, however, voided any blood from the urethra, nor had he suffered in any considerable degree from the peculiarly painful sensations at the extremity of the penis which usually accompany this disease. He was a pale, delicate-looking person, and bore the aspect of great and long-continued suffering. The bladder had been examined just previous to his coming to the hospital, when the presence of a calculus had been clearly ascertained.

He gave the following history of his complaint:—As long as he could recollect, he had been subject to a dull aching pain in the situation of the bladder, which would at times become greatly increased for a day or two, and then subside into the usual constant uneasiness of the part. When he was about 12 or 13 years of age, the symptoms of stone had, from some cause or other, become very urgent, and, the bladder having been sounded, the nature of the disease was at once detected, and an operation was proposed for its relief; but his parents objecting to its performance, the severity of the pains after a time subsided, and he got into much the same state as he was before the occurrence of the attack. At this time he suffered a great deal from pain in the glans penis and along the urethra, which left him, together with the other urgent symptoms, and never returned, at least in any considerable degree. He continued in a state of uneasiness, sometimes better, sometimes worse, until within about twelve months of his admission into the hospital, when, in consequence of drinking largely of stale beer while at harvest work, his pains rapidly became worse, and continued to increase until at length he felt himself obliged to give up his work. The pain at last became so constant and severe, as to deprive him entirely of rest at night. He had never taken any medicine for the disease, with the exception of decoctions of marsh-mallow, parsley, and some other simple remedies, which appeared to have afforded him slight but temporary relief.

State on Admission.—Constant aching pain over the region of the bladder; tongue furred; pulse quicker than natural, particularly when the pain is most severe; irritative fever; has little or no sleep at night. A copious mucous deposit in the urine, which has an ammoniacal smell; a small quantity placed under the microscope, displays an immense quantity of crystals of the triple phosphate, with a large number of pus corpuscles. It is evident that the presence of the foreign body in the bladder is the source of a great deal of local irritation of the organ, with its accompanying constitutional disturbance.

The patient having been ordered to keep his bed for a few days, small doses of the muriate of morphia were administered at night, with a demulcent decoction of linseed for common drink during the day, and under these means the general and local irritation had so far subsided, as to allow of his bladder being examined, when a calculus was easily discovered.

Nov. 14.—The patient being now comparatively free from constitutional disturbance, and otherwise in a favourable state to undergo the operation, lithotomy was performed in the ordinary manner; the incision of the integument and muscular tissues of the perinæum being free, with a limited division of the prostate gland, which was partly divided with Fergusson's probe-pointed bistoury, and partly with the blunt gorget, on a staff of French construction, with a very deep and wide groove placed, not laterally, but at the back of the instrument. Nothing particular occurred during the operation, besides the division of a small artery, which afforded a trifling hæmorrhage, but did not require a ligature. The stone, although the incision of the prostate had purposely been made very small, was easily laid hold of and extracted; it was of a somewhat quadrangular flattened form, weighed an ounce and two scruples, troy, and measured an inch and 5-8ths in its length and breadth; not particularly rough upon the surface, and was apparently composed entirely of lithic acid.

From this date, the patient gradually recovered from the effects of the operation without the occurrence of a single unfavourable symptom; the urine continuing to flow through the wound until the 13th day, when the whole of it passed through the urethra; all the former irritation of the bladder has subsided, and the wound in the perinæum has healed; he will therefore be shortly discharged from the hospital.

Remarks.—I should scarcely have considered this case worthy of being recorded, except that I thought it went to illustrate a fact of great practical importance to the successful performance and issue of the operation of lithotomy; I allude to the dilatibility of the prostate gland,—a circumstance which has been dwelt upon with great earnestness by several distinguished writers on the subject, especially by Sir Benjamin Brodie, and more recently by Mr. John Adams in the last chapter of his valuable work on "The Pathology of the Prostate Gland."

Thus, in the foregoing instance, I purposely made a very small incision of the prostate, not pushing the blunt gorget so far as it is usually pushed in the operation, but only just so far as to allow of the fore-finger of the left hand being passed into the bladder, where it appeared to be grasped by the divided prostate so tightly as only just to allow of the introduction of the flat blades of a small pair of forceps by its side, when, having grasped the stone, which it will be seen was of considerable size, and greatly disproportionate to the limited dimensions of the incision, I succeeded, by two or three gentle lateral movements of the instrument, in extracting it, no impediment being offered by the perinæal muscular tissues, which had been freely divided in the operation.

Liverpool.—The Town Council have assented to the conditions imposed by the late Earl of Derby in the bequest of his collection. A building is to be erected near St. George's Hall, for a public museum and library.—The following is from the *Liverpool Journal* of Saturday last:—"New Mode of Treating Inflammation of the Brain.—An inquest was lately held before H. Churton, Esq., at Little Budworth, in Cheshire, on the body of Robert Penkett, aged twenty-one years, whose death was supposed to have been caused, or hastened, by a beating given him with a stick by his grandfather, under medical advice. It appeared, that the deceased had been sent by his grandfather to Budworth Mill for a batch of flour, but returned without it. At this time he complained of being unwell, and went to bed. His illness terminated in delirium. As the deceased became worse, the grandfather sent for Mr. Meek, surgeon, of Tarporley, who said, "nothing was amiss with him but what he took upon himself;" and advised the grandfather to give him a good beating. Acting upon this advice, the grandfather administered a very severe correction. The boy died on Saturday last. Another surgeon, who was called in, attributed the death of the deceased to inflammation of the brain; and the jury returned a verdict to that effect, accompanying it with a severe censure on the conduct of Mr. Meek. Some account of the recent scarlatina epidemics will soon be furnished us by Mr. Gibbon, of the Northern Dispensary, who has attended a large number of cases.

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LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

Monday, January 5.—Epidemiological Society. Half-past Eight o'Clock.

Tuesday, January 6.—Government School of Mines and of Science Applied to the Arts. Lecture by A. C. Ramsay, Esq. *Subject:*—"Geology." One o'Clock.

——— ——— Pathological Society of London. *General Meeting for Election of Officers.* Seven o'Clock.

Wednesday, January 7.—Government School of Mines and of Science Applied to the Arts. Lecture by W. W. Smyth, Esq. *Subject:*—"Mining and Mineralogy." Three o'Clock.

Thursday, January 8.—Government School of Mines and of Science Applied to the Arts. Lecture by Dr. Percy. *Subject:* —"Metallurgy." One o'Clock.

Saturday, January 10.—Medical Society of London. *Subject:*—Mr. Hancock, "On Some Cases of Excision of the Joints; with General Remarks on the Operation." Eight o'Clock.

Medical Times & Gazette.

SATURDAY, JANUARY 3.

OUR FUTURE.

We this day commence a New Journal, formed by the amalgamation of the *Medical Times* and *Medical Gazette*. We have already sufficiently announced this union to our Readers and Contributors, and it, therefore, only remains for us to introduce, in a few brief words, the Present Series.

In these days, when every section and party requires its own organ, and when the periodical press is the embodiment and representative of much of the genius of the age, a Journal both receives its character from its party, and in return stamps something of its own reputation upon those it represents. This is, however, less the case with Medical than with other Journals. We do not make our constituents, nor can we extend our party. We merely represent a section of society, already formed and seeking a voice. The worst Journal in the world would do no harm to Medical Science, though it might damn a political party; the best would not enhance its value, though it might more widely diffuse its influence. Yet it is necessary that this great and useful segment of society should be fitly represented, and that its published organs should be worthy of its intelligence and its position.

We believe we may safely say, that the greater portion of the Medical Periodical Press of this country has for some years been distinguished for high and rare intellectual and moral qualities. The medical science of England has not been unfitly or dishonourably represented in the scientific arena of the world. We can boldly leave our Journals to descend to posterity, and need not fear to let the scientific character of the age be founded on their contents. Yet we cannot disguise from ourselves, that the vast strides made by the Medical Press of other countries, renders it necessary for us not to forget the race that lies before us, in dreaming over the achievements of the past. If we have already done well, we must henceforth do better, or we shall not keep pace with the rapid progress of the time.

The duties which lie before us embrace two very different objects, and conduct us to two distinct points. We have, in the first place, to consider the Profession as a social body, having its own organisation, and its peculiar form, linked by special ties with the other sections of society, and administering in its proper vocation to the general prosperity of the common weal. It is, in fact, to us, a social and political entity, affected by various circumstances, and brought into collision with numerous interests. In expressing our opinions on the different questions of policy and of organization which arise from time to time, we have hitherto had but a single rule;—we have endeavoured to acquire a thorough knowledge of the point in question, and have expressed our opinion on it openly. If at times we have been in opposition to any of our readers, or if hereafter we may be advocating views with which they do not agree, we are sure that they will not fail to give us credit for honesty and deep-felt conviction.

Our second duty is easier in reality, if more laborious in appearance. We have to represent the Profession as a scientific body, with its peculiar subjects of inquiry and research. We do not doubt that we shall amply satisfy the just demands of the Profession, and that our columns will contain the best information of the steady progress now making in Medical Science.

It is not thought necessary to introduce our undertaking at greater length; for after all, it is by our fruits, and not by our intentions, that we desire to be judged; and we therefore present ourselves, without further preface, before the judges whose favourable decision we trust we do not too confidently anticipate.

OUR RELATIONS WITH THE HOMŒOPATHS.

The attitude of the Medical Profession towards homœopathy has been productive of many advantages. Not the least of these is, that the leaders of this sect have felt themselves compelled to write in their defence; and that, in consequence, we are put in possession, in an authentic form, of the grounds on which they seek still to maintain fellowship with the regular practitioner, to consult with him in regard to the management of his cases.

Two distinct points of contact are thus indicated, from both of which the regular practitioner shrinks, and towards which the homœopath eagerly presses. On both these we have a few remarks to offer. *First, is the homœopath entitled to claim Fellowship with the regular practitioner?* "How can two walk together except they be agreed?" is a question which was long ago put, and to which there can be but one satisfactory answer. Fellowship implies concord, correspondence, union,—a common ground or common

aim, or something between two parties, on which their sentiments and feelings can harmonise. Between the regular practitioner and the homœopath no such relations can by any possibility exist. The homœopath has exhausted the vocabulary of abuse to discover insulting epithets to heap on the men whose creed he has abandoned. He has sought to hold them up to the scorn of those who may be weak enough to listen to his invectives, as men prejudiced by interest against the reception of truth, groping their way amid palpable darkness which they seek not to illuminate; and, having only a mercenary object in view in the pursuit of their Profession, prostrating themselves at the shrine of Mammon, regardless alike of the voice of science or the real interests of those who confide in their care. Nor have the Profession been slow to retaliate, knowing as they do the many facilities which the practice of medicine affords for the imposition of the dishonest, and seeing how eagerly these have been seized by the perverts from their faith; regarding, moreover, with disgust the sycophantish fawning with which the follies of the fashionable are pandered to, they have denounced homœopathy in no measured terms as an imposition, and its professors as impostors. In this there may, perhaps, have been too much precipitancy. For it may safely be affirmed, that there is no limit to the follies which the human mind will embrace, and that, generally speaking, the more abject the folly the more pertinaciously is it clung to. But still, with every wish to be charitable, this madness savours too much of method,—of a method which has never scrupled to avail itself of every means for its advancement, even at the risk of practising deception on its votaries. For these causes, then, there can be no congenial intercourse between the medical practitioner and the homœopathist.

1st. Because, professing to aim at the same end, they seek its attainment by the most opposite means.

2nd. Because each believes the other to be in deadly error.

3rd. Because the homœopathists began and have continued their system by heaping such abuse on the regular Profession, as cannot fail to excite in them feelings of indignation or contempt.

4th. Because the regular practitioner sees in the system of his opponent such manifest deception, that he must either believe him to be a foolish dupe, or to be a cunning and dishonest pretender.

5th. Because the men whom he has known, and who have seceded to the ranks of homœopathy, are almost all deservedly looked upon with suspicion, and few of them would have been voluntarily chosen as associates by any high-minded practitioner, even had they remained in the ranks of the Profession.

Secondly. *Is the homœopathist entitled to consult with the regular practitioner in difficult cases of disease?* That the ultimate object of every consultation is to determine upon the method by which a patient may be most quickly, easily, and safely cured, is a proposition which admits of no dispute. The patient's simple desire is to be cured; for this end only does he call for advice; and although there are undoubtedly subsidiary objects which must engage the attention of the physician, yet these derive all their importance from the influence which they exercise on the treatment of disease. It is evident, however, that most practitioners of the old school are perfectly ignorant of the homœopathic treatment of any disease, or that, if they have studied it, the opinion which they have been led to form of it is such as to prevent their ever employing it in practice. They cannot, therefore, be of the slightest use to the homœopathist,—they cannot tell him wherein they think he may have erred; they cannot advise him as to the course which he ought for the future to adopt; there is no common ground on which they can meet, and, under such circumstances, what would a consultation be but a solemn farce—an imposition practised on the patient for the purpose of inspiring him with a security which had no solid foundation to rest on. But it has been alleged, that, although a consultation may be useless for the purpose of treatment, it may yet be resorted to for the sake of diagnosis. It is not very plain how far a physician may be justified in employing his skill in diagnosis, with the knowledge that the result of that skill was to be used as a means of practising what he believed to be a deception on the patient. It seems, also, rather too much to expect that a medical practitioner of the regular school should voluntarily kneel down and allow his back to be made the stepping-stone from whence the knights of this new philosophy should mount their hobby, and tread down him and all his beliefs into the mire. Nor is it very apparent, how the diagnosis of the regular school can be made very available for the therapeutics of the modern innovation. The diagnosis of the one attempts from certain symptoms to arrive at a knowledge of the nature of the disease, in order that it may be opposed with those remedies the employment of which is warranted by experience. That of the other merely consists in grouping together the appearances which the disease presents; not that deductions may be drawn from these as to what the state of the system is under which they have been produced, but only that a remedy may be resorted to which is supposed to have the power of producing a similar groupe when given to a healthy person. Between such methods of diagnosis there is no real correspondence, and to pretend that any enlightenment could follow a conference between the practitioners of two such opposite systems, is merely an attempt to impose on the public.

PRIVATE LUNATIC ASYLUMS.—ABBOT'S GRANGE, CHESTER.

Our attention has been called to a controversy which is going on in the North respecting the establishment of a Private Lunatic Asylum at Abbot's Grange, in the neighbourhood of Chester. At a meeting in Staffordshire the other day, Lord Shaftesbury (Ashley), in advocating the establishment of lunatic asylums for the middle classes, is reported to have said, that he hoped to live to see the day, when every private asylum in England would be abolished. We have all along deprecated the present defective state of the Law of Lunacy; but we are not prepared to recognise the principle, that the relatives of the insane must perforce send them to a public asylum. One of the most cogent arguments in favour of the present Act (8th and 9th Vic. cap. c.), was, that on establishing a more perfect supervision over private asylums, abuses would be corrected, the public gradually acquire confidence, and many a poor creature be released from the *duresse* and martyrdom of "cottage treatment." This proved to be the case. After the passing of the Act, a sudden increase in lunacy cases became apparent, from the number of patients who were transferred from private houses into asylums. The desire above expressed by Lord Shaftesbury would be clearly a retrograde movement. For many persons, rather than confine their insane relations in a public asylum, would fall back on the old system, and confide them to the equivocal care of peculating friends. The expe-

diency of establishing a private asylum at Abbot's Grange rests very materially upon this ground; for we are informed that insane patients in Cheshire must at present either be taken care of at home, or sent beyond the *surveillance* of their friends into the private asylums of adjacent counties. This is an evil which the Recorder and Corporation of the borough will do well to consider,—at all events, as they have the power of granting, so have they the power of rescinding the licence. Abbot's Grange, we are informed, is beautifully situated, and well adapted to the purpose.

REVIEWS.

The Principles and Practice of Obstetric Medicine and Surgery, in Reference to the Process of Parturition; with 120 Illustrations on Steel and Wood. By Francis H. Ramsbotham, M.D., Fellow of the Royal College of Physicians, Physician to the Royal Maternity Charity, etc. etc. Third Edition, enlarged. 8vo, pp. 726. London: Churchill.

Of the above book, the author informs us, in the Preface to this the third edition, 4,500 copies have already been circulated among the members of the Profession. This fact speaks more strongly in its favour than any praises we could bestow on it. The first edition was a complete treatise on the art of Midwifery; to the second, a most excellent chapter was added, on the Diseases of the Puerperal and Pregnant States; to the present edition considerable additions have been made. The propriety of administering anæsthetic agents in labour, is discussed at length, and with that clearness and sound sense which distinguishes all Dr. Ramsbotham's reasonings. We commend this chapter especially to the consideration of practitioners of midwifery; all must be prepared to administer chloroform, or to assign substantial reasons to the patient for refusing to annihilate the pains of labour. Dr. Ramsbotham is by far the most able of the opponents of the practice.

With reference to the other additions, the present work contains some remarks on the employment of galvanism in lingering labours, and on the turning of the child in cases of head-presentation; where there exists a small pelvis; an admirable section on the circumstances under which the removal of the placenta before the child, when the os uteri is covered by that mass, is the best practice, and those in which the operation of turning is to be preferred.

"If," says Dr. Ramsbotham, "the os uteri were widely dilated when the patient first came under our observation, and the placenta wholly, or in great part, lying in the vagina, so that it could be removed *without passing the hand into the uterine cavity*;—if with this the woman was so much depressed by the previous flooding, that we feared the collapse, necessarily consequent on the removal of the uterine contents, might terminate in a mortal syncope; and if a draining of blood were still going on,—having administered a dose of ergot of rye, with or without stimuli,—we might imitate the older authorities, and take away the placenta at once; for, by so acting, we should give an opportunity to the uterine vessels to diminish their calibre, after the evacuation of the liquor amnii,—give an opportunity also to the head of the child to come down upon the os and cervix uteri, and thus plug the open apertures there existing,—and, at the same time, furnish the best, or rather only, means of affording compression to the vessels in their course through the uterine parietes, and of moderating the flow of blood along them to that part of the organ from which the placenta has been detached."

The connexion between the maternal and fœtal systems, through the intervention of the secundines is entered into more fully than in the preceding editions, and an attempt made to account for the first-drawn sob. Other points of interest, with reference to the subject of obstetricy, which have come before the Profession since the publication of the second edition, are introduced in the form of notes.

New tables have now been calculated, from 13,253 fresh cases, supplied by the Maternity Charity. These, Dr. Rambotham observes, have disturbed the previous averages. A coloured plate has been added, to illustrate the difference between the true and false corpus luteum.

When we consider the excellence of the matter, the completeness of the work, the number, beauty, and fidelity to nature of the illustrations, the style in which it is got up, and its price,—we have no hesitation in affirming it to be the best and cheapest work on the subject of midwifery ever brought before the Profession.

On the Nature and Treatment of Softening of the Brain. By Richard Rowland, M.D., Assistant-Physician and Lecturer on the Principles and Practice of Medicine at the Charing cross Hospital, etc etc. 8vo. P. 137. Highley and Son. 1851.

Dr. Rowland commences by enumerating the principal varieties of cerebral softening, and then passes in review each of the leading symptoms of the disease. These symptoms are grouped under the following heads: — Intelligence—Speech—Voluntary Motion—Sensation—Headache—Special Senses—Digestive Organs—Respiration—Circulation—and Countenance. In the sections devoted to these symptoms will be found many valuable remarks. Dr. Rowland next treats of the causes of cerebral softening, making considerable use of the Registrar-General's Returns; as, in these Returns cerebral softening is not recognised as a distinct disease, and as paralysis may arise from many other causes, it appears to us, that the deductions drawn from them are not very trustworthy.

With reference to the nature and pathology of cerebral softening, our author observes:—

"The facts now to be adduced will, I think, justify the conclusion, that there are several morbid processes which lead eventually to the disintegration of the cerebral texture."

The principal cerebral affections to which softening is consecutive, Dr. Rowland states, are meningitis, cerebral congestion, sanguineous apoplexy, and morbid growths within the cranium. The morbid processes on which the softening itself depends—inflammation, fatty degeneration, and obstruction of the cerebral vessels. Five pages are devoted to the consideration of the diagnosis and prognosis of cerebral softening; the last ten, to the question of its treatment.

"The remedies to be employed," Dr. Rowland remarks, "will vary with the view taken of the pathology of any given case; thus, when the patient is robust, and the symptoms indicate inflammatory action, the lancet must be used and mercury administered. In other cases, powerful stimulants, wine, ammonia, etc., are the means to be employed."

On the Impregnation of the Ovum in the Amphibia. (First Series.) By George Newport, F.R.S., etc. From the "Philosophical Transactions." 1851. 4to. P. 242.

Mr. Newport has been for some years engaged in a series of investigations on the development of the embryo; and the "Transactions of the Royal Society," for 1841, contains a paper by him on the Development of the Myriapoda. In this communication he has endeavoured to show the condition of the ovum of the amphibia through its earliest changes, and also before and immediately after impregnation; and has detailed experiments made with a view to learn by what means its fecundation is effected. With reference to the latter, Mr. Newport considers that he has here proved, from actual experiments, that the spermatozoa alone, in all cases of communion of the sexes, are the sole agents in impregnating the ovum; and further, that impregnation cannot be effected by the liquor seminis. This paper is one of the highest order.

Medical Diary and Journal for 1852. 4to. Smith.

This is one of the excellent books brought out annually by Mr. Smith; books which, whoever uses them for one year, will not fail to obtain them for each succeeding year. We hope, in the next edition, a little more care will be taken to make the list of medical officers attached to the hospitals more perfect. Either the date at which the list is made up, should be affixed, or the list itself made up later in the year. The following are some of the errors that struck our eye:—"Assistant-Physician to Middlesex Hospital, Dr. Johnson; Physician to the Free Hospital, Dr. Heale; Physician to the London Hospital, Dr. Frampton; Assistant-Surgeon to the Orthopædic Hospital, Mr. D. Chanie." Again, why enumerate all the medical officers of some charities, and omit all those of another? To be of any use these particulars should be correctly given.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

In commencing a correspondence with the *Medical Times and Gazette*, we judge it expedient to apprise the readers of the journal of what we consider, properly speaking, to be the duties of our office. We cannot, however, proceed even to this preliminary, without expressing with how great degree of hesitation and of diffidence,

we assume the pen relinquished by our learned and able predecessor. His example of moderation and his love of truth we shall endeavour to hold always in remembrance, and from their contemplation we and our readers shall, we trust, still continue to reap the benefit.

The great aim of our correspondence shall be to keep the readers of the *Medical Times and Gazette* familiar with the progress of medical science in this metropolis, and throughout Scotland generally; in a word, to insure the reflection in these columns of all worthy subjects of Medical and Professional interest. The statement of facts shall occupy us more than the advancement of opinions. When, however, we feel called upon to express the latter, we shall endeavour to do so with a manly boldness and in a gentlemanly spirit. It is not from the open and candid statement of truths that harm and offence arise, but from their concealment, or only partial disclosure. We shall occupy ourselves with their investigation, and conceiving no scrutiny too minute, no labour too fatiguing, our ambition shall be, by a steady adherence to these duties, to secure the approbation of all right-minded and honest members of our Profession; and having these, we care not to forego the support or to encounter the opposition of all others. To descend for a moment to particulars, and to advert to those repositories of knowledge from which we shall expect to draw most largely. We promise the readers of the *Medical Times and Gazette* an account of the scientific information which the University, the Hospital, and the various learned Societies of Edinburgh so largely afford. We shall endeavour to furnish, in as concise and useful a manner as possible, accounts of individual cases remarkable for their rarity or interest, whether as regards diagnosis, treatment, or pathology.

INSTITUTION OF THE PHYSIOLOGICAL SOCIETY.

We call attention to the institution of this Society, on account of the benefits which we think must necessarily accrue from it. It has been organised mainly through the instrumentality of the indefatigable Professor of the Institutes of Medicine, its object being, to quote his words, "the investigation by every possible means of the structure and functions of organised beings, in short, the advancement of physiology in its widest sense."

RECENT DECISION IN REGARD TO MEDICAL EDUCATION IN THE UNIVERSITY OF EDINBURGH.

Public attention has again been directed to the important subject of medical teaching in our University, by a recent decision of the Inner Division of the Court of Session; while the attention the subject deserves, and will necessarily excite, receives an additional importance from the anomaly the University at this time presents, —of a homœopathic Professor daily addressing his students on the first principles of general pathology. The decision further points out a speedy, an effectual, and, as we think, a most legitimate manner of doing away with this most distressing anomaly. We do hope, that the Senatus of the University will now act for the best, and see the propriety and necessity of devising liberal things. Meantime, considering the subject as one of vital importance, and one over which public opinion is now likely to exercise a powerful and we doubt not a salutary influence, we take this early opportunity of adverting to it. The controversy between the patrons of the University and the Senatus, to which the decision of the Inner Court has reference, is no new one; on the contrary, it has witnessed since its origin the revolution of, at least, eleven years, as we find by consulting a somewhat voluminous collection of pamphlets and other documents which we have present before us. It began in this wise:—

So early as in 1839, the Senatus Academicus and the two Colleges had conferences as to medical education; agreeing on most points, but differing as to university monopoly. The Professors in the Faculty of Medicine, whose interests it most nearly concerned, shortly afterwards endeavoured to break up the monopoly to a certain extent, at least so far as the recognition of the London and Dublin lecturers was concerned. This proposal of the medical Faculty met, in the first instance, with the opposition of the Senatus. It was followed by memorials from both Colleges in favour of Edinburgh, and by the remarkable letter of Professor Syme, liberally urging its adoption, but illiberally excluding Edinburgh from its advantages. "For several years," wrote Mr. Syme to the Lord Provost and Patrons, "there has been a progressive diminution in the number of students; and it is evident that, if this annual falling off continues, the classes will soon become so small, as not either to provide an adequate support for the Professors, or to offer a sufficient stimulus for their exertions in teaching." Here was the evil—and a crying one it was—and the medical faculty felt it to be so. The remedy at once occurred to Mr. Syme, and he proposed it—to acknowledge extra-academical teaching to a certain extent; but unfortunately, and, as the sequence proves, unwisely, London and Dublin were to be benefitted, but not Edinburgh. To continue our history: Mr. Syme's letter was very naturally followed by a memorial from the extra-academical lecturers, and by almost unanimous representations from both Colleges. Thereafter the Senatus yielded to the Medical Faculty, and regulations admitting extra-mural teaching to the extent proposed by the latter were transmitted to the patrons for approval. The patrons ordered the printing of the documents, but, to their credit authorised the inclusion of the Extra-Academical School of Edinburgh in the advantages. The final arrangements of the patrons were adopted on the 26th of January, 1847. At this the Senatus grumbled, went back to their original statutes, and instituted law proceedings against the patrons, disputing their title to legislate in regard to University curricula. This case was decided by the Lord Ordinary during last year, in favour of the patrons, and his decision was recently confirmed by the whole Court.

Such is a short sketch of this most instructive controversy. A grievous error we conceive was committed through the illiberality of the Medical Faculty, which, without adding more, we trust they have now seen reason to deplore. The remedy is still open, and may yet be extended by them with a good grace. We advise them strongly to yield, and not to carry their case to the House of Lords, which, after all, seeing the decision is also against them in the Reid Fund case, and they have no other available resources, would be little short of insanity. Let the lectures of the Extra-Academical School of Edinburgh be placed on the same par as to privileges, as assuredly they are as to talents and acquirements, with their brethren of London and Dublin; this done, we shall not long have to deplore that a homœopathist instructs the students of our University, however long his presence as Professor may contaminate the medical faculty. Let the Professors attentively consider the important words of the Lord Provost, in his late excellent speech: "If the professors would join issue with the Town Council, they had the remedy in their own hands, not only against Professor Henderson, but against any Professor who might be unable, or not be particularly well qualified to discharge the duties that devolve upon him." And let Mr. Syme consider well his own pregnant and prophetic words, when, in the letter we have alluded to, he honestly makes the admission, "it is plain that the present system tends to benefit most those who prove remiss in the discharge of their duty."

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. P. M. Latham, President, in the Chair.

Dr. Quain presented specimens from a case of

CANCER OF THE LUNGS, PLEURA, PERICARDIUM, BRONCHIAL AND OTHER GLANDS.

And gave the following history of the case, as obtained by Mr. Dickinson, of the Brompton Hospital. A. M., aged 50, a servant, and a widow, having had two children, was admitted into the hospital under the care of Dr. Cursham, on Oct. 13th. She had always lived well, and enjoyed good health, save that seven or eight years ago she vomited considerable quantities of blood. This attack appeared to have been connected with some derangement of the menstrual function. Her present illness came on seven months before her death, when she was attacked with cough and slight expectoration, with occasional pains in the chest. From this time she began to lose flesh, her appetite failed, and for the last two months she had had œdema of the legs, for which she had been subjected to acupuncture. On admission, she was pale and sallow, complaining of pain in the chest, troublesome cough, with scanty expectoration of a serous character, and of great dyspnœa, which prevented her lying down at night. She had pain in the legs, which were œdematous, and discharging, through an ulcer on each, a considerable quantity of fluid. She slept badly, and had a bad appetite. Bowels rather confined. Catamenia had ceased for the last two years. Hair black; eyes grey; fingers not clubbed; pulse 68; respirations 32. Felt very weak and low; was very irritable, obstinate, and anything but communicative. On examining the chest, the right side was found to move but little. It was an inch and a half more in its circumference than the opposite. There existed great and universal dulness over the whole side. The vocal vibration was not felt, and respiration was not heard at the lower parts. Over the upper parts of this side, more especially behind in the supra and intra-scapular regions, there was a remarkably loud bronchial breathing with bronchophony.

On the left side, there was dulness and a peculiar prolonged respiratory murmur. Over the heart there was heard, with the impulse, a rough, almost rasping sound. She continued to get worse; about ten days before her death the left arm became considerably swollen and œdematous. The dyspnœa increased; and, after about a month's stay in the hospital, she gradually sank.

Post-mortem.—Body not particularly emaciated; œdema of the left arm as high as the elbow, and of both legs as high as the hips; on the outer side of the left leg was a simple ulcer the size of a shilling; and on the right leg the cicatrix of another as large as a crown piece. The mammæ were atrophied. On opening the chest, the right lung was found adherent to the wall of the cavity at the base by a strong band. At the left side there were some slight old adhesions. In the right pleural cavities there were three pints of sero-sanguineous fluid; in the left, scarcely any. The costal pleuræ on both sides were studded with small, flattened, hard laminæ, varying in size from a split-pea to a sixpence. There were also a few calcareous particles the size of peas beneath the costal pleuræ. The right lung weighed 29 oz, was contracted in all its dimensions, and its surface irregularly studded with small, projecting, firm masses. On cutting into these, the whole lung was found to be closely studded, more particularly at the base, with similar masses. These varied in size from a small pea to that of a walnut, and were more distinctly bounded at their margins than are similar masses of tubercle. They felt solid and firm, but were easily crushed between the fingers, and were of a pinkish-white colour. The vessels and bronchi throughout the lung were remarkably patulous. The left lung weighed 19 oz., was about the natural volume, and contained several masses similar to those in the right lung, but smaller. There was grey hepatisation of a small portion at the base of this lung. The heart weighed 11 oz. Beneath the visceral pericardium, more particularly at the base, were observed a number of flattened, firm patches, in size from a flattened pinhead to a sixpence. These masses rendered the surface of the pericardium rough; and, on cutting into them, they were found to intrude but slightly on the muscular tissue. There was some thickening of the left and right auriculo-ventricular valves, more particularly of the left. Above the root of the lungs there was found a large mass of the same morbid matter. This mass extended to, included, and compressed the trachea, and more especially the arteria innominata and the left vena innominata. The thoracic surface of the diaphragm presented several flattened masses on its surface, and a mass of the same matter as large as an egg occupied the lower part of the anterior mediastinum. The liver weighed 40 oz., was healthy but congested; spleen small, weighing but 2½ oz.; pancreas small. The kidneys weighed each 5½ oz, and were healthy but congested. The mucous membrane of the alimentary canal was much congested. The lumbar lymphatic glands contained matter similar to that described in the lungs. The uterus contained in its substance a small mass of deposit similar to that found in the lungs. Portions of the morbid matter from nearly all the situations in which it existed were examined with the microscope, and found to consist of cells and a stroma or basis. The fully-developed cells were about twice or thrice the size of blood-globules, generally spherical or oblong, and contained large, well-marked nuclei, granules, and oily particles. Some of these cells presented a peculiar appearance—a vacant space from which nuclei seemed to have escaped. The stroma was remarkable for the fineness of the fibres of which it was composed; these were irregularly disposed. Dr. Quain remarked, that this case presented a good example of primary cancer of the thoracic organs. The morbid appearances were very characteristic, and it was well to direct attention to these cases as guiding us to the diagnosis of these often obscure affections of the lungs.

Dr. Beith, R.N., exhibited, for Staff-Surgeon Dickson,

SPECIMENS OF THE GUINEA WORM

which had been removed from black soldiers at Cape Coast Castle, where the complaint had been known to be exceedingly prevalent, and showed itself most frequently in the legs; accompanied by great pain and circumscribed inflammation, which very commonly terminated in suppuration. This entozoon has been observed in other parts of the body, as the scrotum, eye, feet, etc.; and the cellular is the particular tissue in which it is found. When the pus which eventually frequently surrounds the worm is let out, the parasite is laid hold of, and a piece of thread tied to it, which is fastened to the leg, and by daily traction more and more of the body is drawn out, until at last it is entirely removed, great care being taken to avoid breaking the creature. It is also sometimes gradually coiled round a quill, and thus withdrawn. Dr. Beith exhibited another specimen, in which the filaria Medinensis was seen lying *in situ* in coils in the areolar tissue around the tendo Achillis and the lower part of the muscles of the calf of the leg. The specimen was found by Mr. Busk whilst making a minute dissection of the nerves of the leg of a negro lad who died of tetanus on board the Dreadnought. No symptoms existed during life which could indicate the likelihood of its presence. Dr Beith referred to an interesting paper on this parasite by Mr. Busk, in the "Transactions of the Microscopical Society," Vol. II. p. 65.

Dr. Baly exhibited the diseased parts from a case of

DYSENTERY WITH EXTENSIVE SLOUGHING AND ULCERATION OF THE LARGE INTESTINES.

In this instance the disease affected in its extreme degree large tracts of the ascending, transverse and descending divisions of the colon, and the rectum. The colon presented very numerous ulcers; some of them many square inches in extent, involving the whole circumference of the intestine; others of the size of a shilling; and others of smaller size down to that of a split pea. The surface of the larger ulcerations was, in some parts, dark and ragged from sloughs still adherent, but hanging loosely from the surface; in others pulpy, as if formed of half-dead areolar tissue; in others, again, it was obviously constituted by the muscular coat laid bare by the destructive process; lastly, in three or four instances even the muscular coat was destroyed, and little more than the serous coat remained to preserve the integrity of the canal. The borders of all the ulcers were far undermined, thin, and ragged. The coats of the intestine at the chief seats of the disease, where not destroyed, were much thickened by effused lymph and blood, and vascular congestion. The rectum presented no large ulcerations, but very numerous small round ulcers, here and there confluent, passing deeply into the thickened coats, and producing a worm-eaten appearance. These ulcers, as well as the smaller ones in the colon, could be clearly traced to enlargement and sloughing of the solitary follicles. Dr. Baly exhibited, in illustration of the morbid changes observed in this case, several coloured drawings by Perry and Bagg. The patient from whose body the intestine above described was taken, was a young woman, aged 24, a prisoner in the Millbank prison. She had been convicted of the murder of her infant child by burying it while alive; and, like many persons of the lower class guilty of extraordinary crimes, was very dull in intellect. Hence she had been ill a fortnight before she made such complaints as caused her removal to the infirmary. She then confessed to having had severe purging, with very frequent stools, and much tenesmus; but when seen by Dr. Baly, in the infirmary of the prison, she had these symptoms no longer, but had others which he regards as equally pathognomonic of dysentery or colitis; namely, considerable tenderness of the abdomen, and copious watery discharges, accompanied by symptomatic fever, and a dry, red tongue. These symptoms, according to Dr. Baly's experience, attend inflammation of the large intestines only; and when present even in typhus and typhoid fever, they may be relied on as indicating a severe affection of that part of the intestinal canal; for the most intense and extensive affection of the small intestines alone, in fever, will not produce copious watery stools, nor, except the peritoneum be involved, any marked pain or tenderness. The patient, in the present case of dysentery, died after a month's illness from the hæmorrhage consequent on the sloughing process.

MEDICAL SOCIETY OF LONDON.

Dr. Murphy, President, in the Chair.

EXTERNAL DIVISION OF STRICTURE OF THE URETHRA.

Mr. Coulson related two cases of cure of impermeable stricture by Mr. Syme's operation. William J——, aged 44, was admitted into St. Mary's Hospital, Oct. 13. He had been the subject of stricture eight years. At the commencement of 1849, he was seized with retention of urine, and has suffered from it occasionally ever since. At the time of his admission he passed his urine in a very fine stream, or only drop by drop. A firm obstruction existed five inches down the urethra, through which no instrument could be passed; just anterior to this there was a false passage. On the 15th of October Mr. Coulson divided the stricture through the perinæum. A grooved staff was introduced down to the stricture, and the urethra opened for an inch and a half just above it. The stricture was then divided, and the staff readily entered the bladder. This was withdrawn, and a No. 8 silver catheter introduced, and retained in the bladder forty-eight hours. There was a good deal of bleeding after the operation, but it stopped in the evening. A No. 8 silver catheter was introduced every third day whilst he remained in the hospital, and retained half an hour at each intro-

duction. The patient had not had a single bad symptom; the wound healed readily, and the patient was discharged at the end of five weeks. Mr. Coulson said, that he had seen the patient two days ago, and the largest-sized catheter could be easily passed into the bladder.—The second case was that of a patient, aged 54, who had laboured under stricture nearly thirty years. It had been divided by the lancetted stilette, and periodically dilated; but during the last two years it had become so much contracted, as not to admit a No. 1 bougie. The water came away only drop by drop; and at times retention occurred, which was always relieved by the application of the potassa fusa. Mr. Syme's smallest grooved staff was passed, and an incision an inch and a half in length was made, commencing from close to the scrotum, and carried down towards the anus. The groove of the staff was at once reached, and the stricture divided. A No. 8 silver catheter was introduced, and a considerable quantity of fetid, alkaline urine discharged. There was a little bleeding in the night, which was easily stopped by pressure. The catheter was retained in the urethra forty-eight hours, and introduced every third day for a fortnight, when the patient was able to resume his duties. At the present time, the largest catheter (No. 10) which the orifice of the urethra will admit, passes readily into the bladder. Mr. Syme's direction for the performance of the operation, is, that a grooved director, slightly curved, should be passed through the stricture; and the surgeon, sitting, or kneeling on one knee, should make an incision in the middle line of the perinæum or penis, wherever the stricture is situated. The incision should be about an inch or an inch and a half in length, and extend through the integuments, together with the subjacent textures exterior to the urethra. The operator is then to feel for the stricture, and introduce the knife, or small straight bistoury, behind or on the bladder side of the urethra, dividing, from behind forwards, the whole of the contracted portion. Mr. Coulson said that many severe cases of stricture will yield to persevering efforts at dilatation, or the use of the potassa fusa, or the ingenious and valuable instruments of Mr. Thomas Wakley; but every now and then cases will occur which resist all these means. Some years ago he had published several cases of stricture which he had cured by the lancetted stilette, after the failure of attempts at dilatation and the use of caustic; but there is an uncertainty in the use of this instrument, which does not exist in the operation recommended by Mr. Syme. He said that, among the many and great obligations the Profession were under to Mr. Syme, not the least was for having recommended an operation so easy of performance, and so effectual, for the class of cases to which those he had mentioned this evening belonged.

GALVANIC BATTERY AND BELT.

Mr. Piggott exhibited his battery and belt. He stated that his battery was constructed with the ordinary metals, permanently separated by a porous diaphragm, saturated with deliquescent salts, which latter, absorbing moisture from the atmosphere, excited an electric current. The galvanic belt is made on the same principle, and when used emits a continuous current of electricity. Mr. Piggott mentioned, that in several cases of contracted limbs he had used the galvanic battery in the first instance, and then applied the belt with complete success. He had also successfully applied it to various cases arising from an inactive state of the nervous system.

CALCIFICATION OF FIBROUS TUMOUR OF THE UTERUS.

Mr. I. B. Brown exhibited a specimen of fibrous tumour, which had been transformed by calcification into a solid, heavy body, weighing eight ounces. It was situated at the fundus of the uterus. The sides of the uterus were not adherent to this body, but were distended so as to form a sort of close-fitting bag to the tumour; the neck of the uterus was drawn up and lost in the body, and the os was elongated and thin. This interesting specimen was found in a patient aged seventy years of age, under the care of Mr. Langley, of King-street, Portman-square. The calcareous crust of this tumour consists of semi-transparent plates overlaying each other, having a glassy fracture; these dissolved in dilute muriatic acid allowed an abundant escape of carbonic acid, leaving a residue of an imperfect fibrous basis substance.

Dr. Cogswell read a paper

ON THE ENDOSMOTIC ACTION OF MEDICINES.

After some remarks on the construction of the apparatus,—the properties of different membranes to be examined,—the well-known deductions of Poiseuille, in his Memoir in the "Comptes Rendus" of the French Academy of Sciences for 1844, the author proceeded to mention his own observations. The endosmometic of Dutrochet consisted of a glass tube, with a somewhat bell-shaped moveable expansion called the reservoir, having a deep contraction round the middle for securing the membrane. The form of reservoir preferred by Dr. Cogswell was that of a bell-jar with a projecting rim round the larger orifice, the end of the tube and the inside of the reservoir being ground to fit one another. The reservoir had a capacity of eighteen drachms, and an internal diameter at the larger orifice of an eighth of an inch. The calibre of the tube was a fourteenth of an inch. To support the reservoir the tube was passed through a cork adapted to a hole in a leaden plate, which rested on the edge of the outer vessel. This was a glass cylinder, of such dimensions, that, on receiving the reservoir, a quantity of fluid, equal to the contents of the latter, would rise to the neck, leaving sufficient below the membrane. On consideration, the author had been led to adopt, for closing the reservoir, the cœcum of the sheep, as sold in a prepared state by the French, finding, in comparison with other membranes, that it produced the most marked results. The experiments of Poiseuille were then examined in the order observed in his Memoir:—

Action of Purgatives.—Seidlitz water contained in the reservoir, being opposed to serum, ascended in the tube. Albumen was found in the reservoir, and sulphate of magnesia in the serum. Now, seidlitz water causes an unusual quantity of albumen to appear in the alvine discharges, and of sulphate of magnesia in the urine. Hence the inference is, that this class of purgatives possesses the property of determining a flow of serum towards the bowels. The Author remarked, that it might reasonably be questioned whether serum was a fair representative of the living fluid in the blood-vessels, or its accumulation in the bowels the only physiological effect of the saline purgatives.

Tolerance of Medicines.—The Author remarked, that endosmose was found by Poiseuille to stop at periods varying for different fluids. The outer fluid being then examined, presents a striated appearance from the incomplete diffusion of the foreign matter introduced into it. After shaking it, there is a renewed ascent of the column; and the same thing happens repeatedly. Poiseuille employed a solution of phosphate of soda and serum. The Author repeated the experiment with a solution of the salt, of density 1060, and obtained similar alternations, except as regards the elevation following the second employment of the serum. He left it to be judged, whether the facts as stated would bear out the inference, that the tolerance of medicines arises simply from the circumstance, that "the membranes of the intestinal canal, after being long in contact with the same substance, become impregnated with it, and prevent it from entering so freely into the circulation."

Influence of Opium.—Opium and its salts check diarrhœa, and obviate the purgative tendency of other medicines. A solution of one part of nitre to eight of water was opposed by Poiseuille to serum, and produced an elevation in the tube for three quarters of an hour. While the endosmose was proceeding vigorously, the solution was withdrawn, and replaced by a similar one, containing muriate of morphia. After this the ascent continued, but with less intensity; it proceeded for an hour, ceased an hour, and then the column began to descend. Hence, it is said, the presence of the morphia diminished the endosmose, then put a stop to it, and ended by producing exosmose, such being precisely its effects in promoting constipation of the bowels. The author, however, believed, that if the experiment had been continued without the morphia, the result would have been nearly the same, as he had found that nitre by itself has but a feeble power of endosmose. To ascertain further, whether opium exerts a peculiar influence on membranes unfavourable to endosmose, he had repeatedly opposed an aqueous solution to water, and found it produce much greater effects than some of the inorganic salts. The serum of the sheep inclosed in a reservoir, and opposed to distilled water, containing a gram to the ounce of muriate of morphia, produced a vigorous endosmose for above twenty-four hours. Added to syrup in the same proportion, its effect was not appreciable. He was thence led to believe there was not sufficient ground for characterising morphia as a substance, the presence of which puts a stop to endosmose, and renders the membrane impermeable to either fluid

Influence of Tobacco.—The decoction of tobacco is stated, by M. Poiseuille, to penetrate the membrane, and render it unfit for endosmose. A decoction of four parts of tobacco-leaves to forty of distilled water was opposed to serum. There was a descent of the column in the tube. However, the density of the two fluids was not stated. The author having made a similar decoction, found that, after boiling above an hour, the density did not exceed 1023, when it was not likely to produce endosmose with serum having a density of probably not less than 1026. But a decoction of this strength, being opposed to distilled water, produced an elevation lasting for several hours; and further, a decoction of density 1052, opposed to serum of density 1031, produced a well-marked elevation of the column, which was found not to have stopped in twenty-one hours. The author proceeded to state, that having observed a great variety in the endosmose afforded by different

solutions of the same density, he tried the following experiment:—Four endosmometics, closed with the prepared cœcum, were filled respectively with solutions of sugar, sulphate of magnesia, common salt, and nitrate of potash, and placed in distilled water. In half an hour the first fluid ascended 1-9th inch, the second 1 inch, the third 2 inches, and the fourth 1-8th of an inch. Other membranes afforded corresponding, though less marked results. Thus the common salt was the most energetic at first, and the nitre the least so. But again, the syrup and sulphate of magnesia continued to ascend for several hours, while the common salt stopped in four hours, and the nitre in less than two. Syrup, though it has a remarkable power of endosmose, is not a purgative, which Poiseuille accounts for by its being decomposed by the gastric juice. The author then extended the examination to classes of substances. The results obtained were arranged in a tabular form, and laid before the Society. It was remarkable, that the sulphates from which experience had selected the most generally useful purgatives, had invariably a strong and continued action; while the class to which nitre belonged was comparatively feeble. Chlorate of potash and the iodide and bromide of potassium were among the substances which had the lowest place in the tables. Gum and liquorice showed a moderate degree of energy, but it continued uninterruptedly for weeks. The author, after entering into some further details, said, he mentioned these as coincidences, which might prove useful aids to investigation, but without any view to the premature construction of a theory. From what preceded, he was led to the following conclusions:—

1. That the division of substances into those which are favourable to endosmose, and those which on the one hand retard and annihilate it, by their influence on the membrane, and on the other render the membrane permeable, or reduce it to the condition of a filter, requires confirmation.

2. That the power of endosmose of different solutions is not regulated entirely by their density, as already observed by Dutrochet.

3. That the purgative salts generally have an energetic power of endosmose, and that this is exerted with more steadiness and uniformity by those which medical experience has selected as the most useful in ordinary circumstances.

4. That some of the other substances have marked peculiarities with regard to endosmose, which will probably assist towards explaining the mode of action on the system.

Dr. Lankester spoke in terms of commendation of Dr. Cogswell's original and interesting paper. It might, possibly, not be considered practical; but many of the theories referred to by the author resulted in practical uses. Investigations proving the errors of old theories were as important as those by which new ones were established. The investigation of the physical properties of matter contributed much to our knowledge of the functions of life; and, although our knowledge of those properties of membranes called exosmosis and endosmosis was very imperfect, it had nevertheless opened out a field for useful inquiry. Dr. Cogswell's experiments proved the theory explaining the action of saline purgatives, by their increasing endosmosis, to be only partly true. The action of other medicines might, perhaps, be explained by them. The great endosmotic power possessed by acetate of ammonia was very remarkable; it showed that this power was not the sole cause of purgation, and might also explain the action of that medicine. He was rather astonished at the conclusions with respect to morphia, as the experiments of Poisseuille and Bachetti showed that it lessened and even reversed the endosmotic action of fluids in which it was dissolved. This explanation of its action in diarrhœa was, consequently, rendered of no use. It must be recollected, however, when reasoning from phenomena occurring out of the body with reference to those which take place within it, that the conditions were different. In the human stomach and intestines there is a living surface covered with cells in a constant state of development, and also with mucus, by which any endosmotic action must necessarily be modified. If Dr. Cogswell's paper only led to negative results, it would still be serviceable, as indicating the necessity for caution on a subject on which there had been a great deal of positive speculation.

Dr. Hanfield Jones remarked, that certain simple homogeneous membranes possessed the power of altering the nature of fluids that passed through them; and adduced the instance of the Malpighian tufts of the kidney. This was a circumstance of some interest to consider in reference to endosmotic action. He then alluded to the case of the renal secretion, in which the blood containing the elements of the secretion on one side of the homogeneous basement membrane, and a layer of albuminous semi-solid matter, in the form of epithelium, on the other; and he suggested, that the elimination of the secretion might be an act of endosmosis.

Dr. Snow said, that, although endosmosis was a very important subject for consideration, it did not assist much the explanation of the action of medicines, even of those of the purgative class. It might sometimes aid the action of some of the saline purgatives, such as Epsom salts; but that drug would purge when repeatedly given in small doses, so diluted as to be of much less density than the serum of the blood. One important point necessary to be borne in mind with respect to endosmosis, has been mentioned by Dr. Golding Bird,—viz., that acetate of potash and other salts, when prescribed as diuretics, must be diluted to such an extent as to enable them to be absorbed, otherwise they would induce endosmosis in the alimentary canal, and act as cathartics. Opium, probably, arrested purgation by lessening the peristaltic action of the intestines. The theory, that it diminishes the permeability of animal membranes, would not explain its power of arresting diarrhœa, even if it were correct; for the absorption of fluids taken into the alimentary canal would be retarded, which would exert a contrary effect. In order to fully understand the action of medicines, other laws must be considered as well as those governing endosmosis.

Mr. Chippendale said that much praise was due to Dr. Cogswell for the manner in which he had conducted his observations, and brought them before the Society. Still he thought if their object was to show that the operation of inorganic salts, as purgatives, is effected by a process of endosmosis, the author had failed. For, in the first place, the fluid found in the dejections is not serum. Secondly, if this were a transudation of fluid by endosmosis, we should expect this to take place principally through the coats of the stomach, and to be gradually diminished along the alimentary canal. Yet experience taught us that the operation of purgative salts is principally in the colon. Again, if serum were to pass through the coats of the alimentary canal by endosmosis, this would be continually going on; forasmuch as the mucus which lubricates the inner surface of the tube is more dense than the serum. If a glaring instance were required to demonstrate that the action of purgatives was not one of mere endosmosis of serum, he would adduce what takes place upon the exhibition of a dose of castor oil. He thought, then, that we should look to some other kind of action of these salts, and that this must be one of the epithelial cells.

After a few observations from Mr. Richardson,

Dr. Cogswell briefly replied.

MEDICAL NEWS.

University of Oxford.—The late Mr. Fielding, of Lancaster, has bequeathed his herbarium, consisting of some 70,000 species, to this University, conditionally.

University of London.—The following gentlemen recently passed the second examination for the degree of M.B.:—

	First Division.	Second Division.
Bartholomew's Hospital	Mr. J. J. Duthoit.	
Guy's Hospital	Mr. W. Odling	Mr. R. Hunt.
,,	Mr. J. S. Stocker.	
King's College	Mr. S. Griffith	Mr. L. S. Beale.
,,	Mr. E. A. H. Head	Mr. J. H. Lakin.
,,	Mr. G. May	Mr. J. Vaux.
,,	Mr. D. H. Monckton.	
,,	Mr. W. S. Steele.	
St. Thomas's Hospital		Mr. J. W. Keyworth
University College	Mr. E. Jackson.	
,,	Mr R. Neale.	
,,	Mr. J. R. Reynolds.	
,,	Mr. H. Thompson.	
Richmond Hospital, Dublin.		Mr. R. H. Courtney

HONOURS.

King's College—Mr. E. H. Head—Scholarship and Gold Medal—Surgery — Physiology, and Comparative Anatomy.
,, Mr. D. H. Monckton—Gold Medal, ditto.
University College—Mr. J. R. Reynolds—Scholarship and Gold Medal — Physiology and Comparative Anatomy.
,, Mr. J. R. Reynolds—Scholarship and Gold Medal—Medicine.
,, Mr. Thompson—Gold Medal—Surgery.
,, Mr. Thompson—Gold Medal—Medicine.
,, Mr. Thompson—Gold Medal—Midwifery.

ORIGINAL LECTURES.

CLINICAL LECTURE ON SURGERY,

AT

St. Bartholomew's Hospital.

By WILLIAM LAWRENCE, Esq., F.R.S.

Under the common name of "cancer" are included numerous affections, differing considerably in history and external character, although agreeing in the important circumstance of dangerous and destructive nature. Their differences depend, in great measure, on the diversities of structure in the organs and tissues which are the primary seat of the malady. Still there are striking varieties in the disease, even when affecting the same tissue, as the skin, for example. In the case of Bennett, you have seen cancer beginning in the integument, and extending rather quickly to the immediately adjacent parts;—to mucous membrane, glands, and muscular fibres; but not affecting the absorbent glands. I next set before you an example of carcinomatous ulceration on the back of the hand, which had not extended beyond its original seat in four years, although it had caused scirrhous disease of absorbent glands. The primary affection in both these cases is not only called cancer, but referred to the particular form distinguished by the epithet *epithelial*.

CARCINOMATOUS ULCER ON THE BACK OF THE HAND.—SCIRRHOUS ENLARGEMENT OF AN ABSORBENT NEAR THE INTERNAL CONDYLE OF THE HUMERUS, AND DISEASE OF A SMALLER GLAND HIGHER UP IN THE LIMB—AMPUTATION NEAR THE SHOULDER.

Case.—Thomas Belgrove, 60 years of age, of large frame and robust constitution, occupied throughout life in farming pursuits, was admitted into St. Bartholomew's, Dec. 2, 1851. He had enjoyed invariable health, having had no illness, nor ever taken a breakfast in bed for the last fifty years. Four years ago, a reddish place—he called it a sort of pimple—was noticed in the middle of the back of the hand. He could assign no cause for it; and a minute inquiry into his occupations and pursuits failed to throw any light on the subject. It increased slowly, and after some time small openings were observed, yielding a thin discharge, described as watery. These gradually spread into one sore, with an appearance, which, he said, was like the inside of a fig: for this various applications were tried without any beneficial result. The sore had increased more rapidly since last autumn, when the glandular enlargement was first observed.

Dec. 2.—There is a sore nearly circular, as large as a crownpiece, on the back of the hand. So far from presenting any evidence of destructive progress, it might almost be taken, at first view, for a healthy ulcer. The granulations, however, are large; the edge slightly raised, indurated, and somewhat irregular; the basis indurated, but easily moveable over the subjacent extensor tendons, which are unaffected. An enlarged and hard absorbent gland, about the size of a large filbert, is imbedded in the adipose texture, between one and two inches above the internal condyle. A smaller swelling, of flattened form, is observed just under the skin, a little below the axilla. The health is good. My colleagues agreed with me in the propriety of removing the limb above the part last mentioned; and I therefore amputated a little below the shoulder, making two slightly semicircular flaps, so as to take away the skin between them with the small gland under it. The basis of the ulcer consisted of skin changed into a scirrhous structure, a line or more in thickness. The subjacent cellular tissue was unaffected, and the extensor tendons were perfectly healthy. The lymphatic gland near the inner condyle was hard, whitish, and without any appearance of its normal structure. The upper and smaller tumour was of a bright red, and not indurated; it was considered to be an absorbent gland. The microscopical characters of the ulcer and of the two glands were those of epithelial cancer strongly marked.

The progress of the stump has been as favourable as the health and strength of the patient might have led us to expect. The further history of this case will be interesting, and I shall not fail to learn it from his medical attendant.

CANCEROUS (?) DISEASE OF THE HAND AND FOREARM, ORIGINATING IN THE CARPAL EXTREMITY OF THE RADIUS.—AMPUTATION OF THE ARM.

Case.—Emma G., aged 33, a married woman, healthy, but rather pallid, and not robust, the mother of five children, states that, eighteen months ago, she experienced in the left upper extremity severe pains, which were considered to be rheumatic. Ten months afterwards, she noticed a small knot under the skin at the back of the wrist. This was regarded by a surgeon as an enlargement of bone, and was treated accordingly, but without any benefit. A second surgeon recommended stimulating applications, under which the swelling increased, and became blended with the integument, which inflamed and ulcerated. Then a large swelling took place on the palmar aspect of the limb, pushing forward the flexor tendons, and occupying one-half of the forearm. She was admitted into the hospital on the 29th of April, 1851. The back of the wrist is occupied by an extensive circular ulceration, measuring three inches in diameter, and surrounded by a broad, thickened, raised, and everted margin. The depressed central part is covered by a dry, black, hard substance, with difficulty separable from the subjacent surface. The whole limb is swelled, hot, and tender. The hand is œdematous, and masses of a soft, almost elastic substance, extending under the muscles along the front of the wrist and the ulnar side of the hand, give to the limb an irregular, nodulated appearance. There is no glandular enlargement in the axilla. A sharp pricking pain extends along the forearm to the fingers. The patient was kept in bed, upon light diet, with proper attention to the bowels, until the heat of the limb had subsided, when I amputated above the elbow, the disease being obviously irremediable by any other means. The examination of the limb has enabled us to ascertain the origin of the morbid growth. In the limb, which I now show you, there is a large ulcer of peculiar character on the back of the forearm and wrist; but the affection of the skin is secondary, this external manifestation being the outbreak of a great mass originating more deeply. A somewhat soft, yellowish white, and obscurely fibrous substance extends from the ulcer on the back of the wrist to the front of the forearm, where it passes downwards under the flexor tendons and the annular ligament into the hand; and upwards, under the origin of the flexor digitorum profundus, about four inches along the ulna. Throughout the substance are interspersed cysts, containing fluid, which is dark red in some; in others straw-coloured and thick, like liquid albumen. The trunk of the ulnar nerve is completely imbedded in the tumour. A large mass surrounds the head of the radius, being covered for some distance by the periosteum; it surrounds the tendons of the supinator longus, and of the extensors of the thumb. A horizontal section of the bone and tumour shows that the latter issues from the radius, the cancellous texture of the head being occupied by the morbid growth, which also extends along the medullary cavity for about two inches. It has expanded the walls of the bone, and made its way externally in the proximity of the wrist-joint, which, however, is perfectly free from disease.

Microscopical examination showed that the diseased structure consisted of cells, with single or double nuclei, imbedded in a loose and sparing fibrous tissue. The cells, which closely resembled those seen in cancerous tumours, always indicating rapidity of growth, varied in shape. Many of them were round; others bean-shaped, or elongated and caudate.

No unfavourable symptom followed the operation, but a general swelling of the stump occurred three or four weeks afterwards, occupying the inferior three or four inches of the part, without redness or pain. She left the hospital with the arm considerably larger than the opposite limb. She reported in September, that the enlargement had entirely subsided, and that she was in excellent health.

The extremities of the long bones are occasionally the seat of disease originating in the cancellous texture. The femur and the tibia are, however, far more frequently affected than the radius, or indeed any bones of the upper extremity, as you may satisfy yourselves by examining the collection of specimens illustrating this subject in the museum of the hospital. Of these morbid growths, some are malignant, others innocent; the former being cancerous or medullary, the latter fibrous, fibro-cartilaginous, cartilaginous, or bony. The adventitious productions, in the latter cases, are analogous to normal tissues, while, in the others, there is no such

resemblance. We cannot always determine, previously to direct examination, the exact nature of tumours; nor do we always succeed, even then, in discovering their true character. Thus, I should hesitate to express a decided opinion respecting the specimen now before you; feeling, at the same time, that the history, the seat, and the rapid growth of the tumour, its minute structure, and the existence of the cysts filled with bloody and other fluids, all correspond with what we have frequently seen in examining morbid growths of malignant character.

The disease first extended backwards, raising the integument of the wrist, and then causing the large ulcer; but its greater portion is in the front of the forearm, under the muscles, and involving certain nerves; thus explaining the pricking and numbing sensations felt in the fingers, as well as the more severe pains which came on at different periods of the disease.

In considering the question, whether the cure effected by amputation is likely to be permanent, you must remember, that malignant disease is less dangerous in this respect, when it originates in bone, than when it occurs in other structures. Hence, if the entire diseased bone is removed, there will probably be no renewal of the malady in the limb, nor development of it in other parts. This consideration made me amputate above the elbow, although there was sufficient room for the operation below the joint. I do not mean to represent, that disease invariably returns when amputation is performed in the bone which has been the seat of mischief. Several years ago I amputated the thigh for genuine fungus hæmatodes developed in the inferior articular extremity of the femur. Although there was considerable, and even alarming, swelling of the stump, beginning before, and lasting after the closure of the wound, it gradually subsided, and I know that the patient remained well for many months. He said, that he would come to me immediately if anything should occur to excite alarm; but I have not seen him since.

On the other hand, secondary disease of an internal organ may arise where the primary affection has been seated in a bone. I was consulted long ago by a stout and apparently healthy gentleman, twenty years of age, for what he considered a disease of the knee. He had experienced some stiffness in the part, and then noticed a swelling below the joint: a pulsation soon became sensible, not distinguishable from that of an aneurism. Against the supposition of aneurism was the circumstance, that the pulsation of the anterior and posterior tibial arteries was unaltered. In a short time the pulsation ceased, the tumour having increased so as to project in front of the limb. It was now soft, with such a sense of fluctuation, that it was determined, in consultation, to puncture, under the supposition that matter might have formed. Nothing but blood escaped, and in a few days a vascular fungus protruded from the opening.

As the nature of the malady was now clear, the limb was amputated above the knee. We found, upon examination, a soft cerebriform tumour originating in the cancellous texture of the tibia, and infiltrating all the surrounding muscles, which were pale and shrunken. Six or eight days after the operation, during which the case had gone on favourably, the patient felt something flowing in the bed. He rang the bell for his attendant, but was dead from profuse bleeding before she could arrive.

Upon examination, the end of the femoral artery was found open; there was no coagulum in the vessel, nor any attempt at closure of the orifice. The ligature had made its way through, and lay in the wound. A single deposit of soft, white, medullary matter was found in the liver.

The examination of the limb had explained the occurrence and subsequent cessation of the pulsation. The termination of the popliteal artery was close on the back of the swelling; and the disease, bound down by the strong fascia of the leg, received a communicated pulsation from the vessel. When the yielding of the fascia had allowed the tumour to expand in front, it no longer pressed on the artery behind.

FRACTURE OF THE FEMUR IN AN AGED FEMALE.—GRADUAL SINKING AND DEATH.—BRITTLE STATE OF THE BONE.

Case.—I next present for your inspection the femur of a very old woman, (beyond eighty,) exhibiting the changes which the bones undergo by natural degeneration in very advanced age.

A fortnight ago, she fell backwards in descending some steps, and the thigh-bone was broken. She was immediately conveyed to the hospital, where Mr. Archer, the house-surgeon, applied to the thigh splints of pasteboard, supported by a bandage hardened in mucilage and chalk, by which the extremities of the broken bone were kept in apposition without any shortening of the limb. She lay in bed quite comfortably, with the injured limb supported by pillows in an easy position. There was neither local disturbance nor general indisposition; but she sank gradually, and expired quietly fourteen days after her admission.

Although this is a specimen of what we call simple fracture, you will observe, that there are three or four loose pieces, making up that part of the shaft between the middle of the femur and the knee-joint; the upper fragment is pointed and sharp, and one of the splintered portions terminates in a sharp point. This preparation shows the possibility of a limited vertical fracture. The fragment which I now raise, still connected to the rest of the bone by periosteum, and measuring three inches and a half in length, is separated in a longitudinal direction. The occurrence of this splintering in consequence of so inconsiderable an accident, is explained by the examination of the bone. The walls are extremely thin and brittle, the firm constituents of the bone having been greatly reduced in amount. The wide medullary cavity is occupied by a thin, oily fluid, which, from partial decomposition, has here stained the bone of a red colour. The head has sunk, and is surrounded in its entire circumference by a prominent ridge of bone, which must have interfered with the freedom of its movements. The neck is shortened, and projects from the shaft at a right angle.

In aged persons, the texture of bone is always more or less brittle and light. In many instances it contains a fatty matter, which in maceration assumes the appearance of adipocire. In some of the specimens contained in the museum, the walls of the long bones are not more than a line in thickness.

N.B. It was omitted to be mentioned, that the wood-cuts inserted in the narrative of the case of Bennett, in the former number of this Journal, are copied from the work of Professor Serre.

While this proof is passing through the press, an account has been received at the hospital that Emma G., whose case has just been related, died about the middle of November, from disease affecting the right lung. The nature of the affection was not ascertained after death.

CLINICAL LECTURES ON SURGERY,

AT

University College Hospital.

By RICHARD QUAIN, Esq., F.R.S.,

Professor of Clinical Surgery in University College; Senior Surgeon to the Hospital.

ON THE DISEASES OF THE RECTUM.

You are aware, gentlemen, that it is my design to add, from time to time, to my lectures upon the individual cases as they pass before us in the hospital, a continuous course on the diseases of a particular organ. Upon this part of my undertaking for the present session I am now about to enter. Retaining the form of clinical instruction, I will, in these lectures, bring together examples of the several diseases that affect the organ or part treated of, arranging them so that they shall illustrate the most prominent of the phases under which the maladies are presented to our observation.

The subject for the present session is to be the diseases of the rectum. Some of these are not often met with, and they are not best illustrated in hospital practice,—they occur most frequently among the affluent,—and for this reason, if for no other, I would think it desirable to bring them pretty fully before you. In taking up this subject, I am, moreover, not unmindful of, or uninfluenced by the fact, that disorders of the rectum, perhaps from having, in this town at least, fallen in a good measure into the hands of special practitioners, do not generally receive in hospitals all the attention which is bestowed on other complaints. And here, in passing, I may say, respecting this specialty in practice, that while the practitioner thereby acquires doubtless considerable dexterity in the hand-work of his art within the limited sphere of his action, there is at the same

time this serious drawback,—that he is prone to take a narrowly bounded view of disease, inasmuch as he inclines to look too exclusively to the organ which constitutes his special occupation, without adequate consideration of the constitutional ailment of which the local disease, though most prominent and most complained of by the patient, is often only a manifestation. I would not imply, that every such practitioner is obnoxious to this objection, for I have known more than one exception; but the tendency of the practice is manifestly in the direction I have indicated.

Something, perhaps, might here be said, likewise, of unworthy practices, attributed to some of the persons who are concerned specially with the management of the class of diseases with which we are now about to be engaged; but, though I have occasionally had reliable information respecting such courses, our time will, in my judgment, be better employed with the careful study of the diseases and of the means of relieving them, than with any investigation into the pathology, so to say, of the conduct of our neighbours. It is not, indeed, according to my experience, those most entitled to confidence as practitioners, that are most inclined to wage a wordy war with the moral aberrations of others, whether those others be strictly within or without the legal barriers of the Profession. By looking well to ourselves—each to his own proceedings—we shall, I dare affirm, most and best contribute to the dignity of our Profession, as well as to its usefulness to the public,—for whom only, be it remembered, the Profession exists. To the public, then, as having the chief interest in the matter, everything beyond this will most properly be left.

Before entering upon our immediate subject, I wish it to be understood, that I do not propose to occupy any time with the classification of the matter of these lectures. Where the natural history of disease is under consideration, the classification of the subjects has its advantages, and may, therefore, fittingly engage the attention; but we are occupied with the patients—with the nature of their sufferings and their cure, rather than with disease in the abstract; and, in such circumstances, the arrangement of the matter of the lectures, beyond the grouping together subjects that present obvious affinities, is immaterial to our purpose. I proceed, therefore, at once, to the main object, and first, to the disease which is most frequently met with—

HÆMORRHOIDS.

The term, strictly or etymologically regarded, means a discharge of blood merely. Though at one time used in a more extended sense, it has, by medical writers, and I might say for centuries, been restricted to disease affecting the rectum; and vascular tumours of that part, whether attended with a discharge of blood or not, have been named hæmorrhoids.

Certain distinctions are admitted by surgeons:—thus, a very old one, according as there is or is not a loss of blood, "blind" or "bleeding,"—*hæmorrhoides cæcæ vel apertæ* of ancient surgery; and again, according to the position, whether the tumour be in view or concealed within the bowel, "external" and "internal." These distinctions are preserved, and we shall by-and-by see that, like most things which stand the test of time, they are not immaterial, inasmuch as the position of the tumour and the condition indicated by the terms referred to, have their influence in determining the method of treatment. Why this is so, we shall see hereafter. The disease seldom affects the very young; but it is remarkable, that few persons attain to maturity without suffering from it more or less. It is met with equally in both sexes. The degree in which it affects different persons is very various, and it has a tendency to increase if unchecked. But these and other circumstances will best appear by examination of our cases, to which I now proceed. I shall begin with an instance of the earliest form of the disease that requires medical treatment.

Mr. J. R., aged 32, applied to me, expressing an earnest desire that I should do anything necessary to relieve him as speedily as possible from a painful "attack of piles." He had been suffering about twenty-four hours. Upon examination, I found the margin of the anus concealed by large and very dark-coloured growths, the thickness of the finger, completely encircling the orifice of the bowel, and only parted by slight depressions. They had very much the appearance of large leeches gorged with blood. At the inner side of this external dark circular tumour (it might be said in the middle) there appeared a single projecting papilla, which was easily distinguished by its shape and colour from the surrounding mass. It was of a vivid red colour, and about the size of the end of the little finger. The external larger tumour gave the idea of a very large vein, with thin walls, distended with dark blood. The inner one seemed as if filled with arterial blood. There had been but very little bleeding—no more than a slight trace during the evacuation of the bowels. When questioned, the patient complained of heat and throbbing pain at the end of the bowel, as well as of the feeling of a foreign body there. The sitting posture was stated to be distressing; and he threw himself back on his chair to prevent pressure on the tumour. Such was the history of the local complaint; but this was not the whole of the malady. The tongue was somewhat furred; it was also larger—broader and thicker - than natural; and, in consequence of this, was tooth-marked—indented—upon its sides. The alvine evacuations were few and scanty; and there was little or no appetite for food. Concurrently with this condition of the alimentary canal, and probably consequent upon it, there was heat of skin with restlessness and a general feeling of discomfort.

The condition thus sketched out, is what was called by the patient, "an attack of piles," and it is usually so named; but, in fact, the state of the rectum in such a case is but part of a more general ailment. The whole intestinal canal is affected. That there is congestion of the canal, we have evidence in the state of the tongue, as well as in the condition of the blood-vessels of the rectum; and to this direct evidence afforded by the parts which are in view must be added, the inference respecting the state of the stomach, and other parts of the intestine, as well as of the liver, to be drawn from the loss of appetite for food, and the deficient and depraved alvine evacuations. The hæmorrhoid is particularly referred to by the patient, because this is the most painful portion of the malady and the most obvious. The organisation of this part, as of others that may be termed outlets of the body, will explain why so much uneasiness is produced by even a small amount of disease in it. And now as to the treatment of our case:—

The patient was sent to bed; warm fomentations were applied to the chief local malady; food was disallowed, with the exception of some common drink and a little bread. A spoonful of castor-oil was given,—to this medicine, it may be mentioned, the patient had for some time been habituated. After the bowels had acted, citrate of potash with nitre was given, with the view of acting upon the skin and kidneys. In two days our patient was returned to business.

In such a case, the chief part of the cure consists in general and medical management rather than strictly surgical interference. The horizontal position of the body is useful, obviously on account of its effect upon the flow of blood in the veins of the bowel; but, indeed, independently of the actual painfulness of the sitting posture, where there is an irreducible protrusion of the hæmorrhoids, the patient is most comfortable when lying down, on account of the general uneasiness and prostration of strength that he feels. To this it must be added, that the warm and equable temperature of bed has its use, all the more, too, if a degree of perspiration should come on. And, while the internal congestion, which is the essence of the disease, is being relieved by the natural emunctories of the body, the ingesta should be in very small quantity, as well as of the least stimulating kind. Precept, however, is scarcely necessary with respect to abstinence; for the appetite is very small, if there be any.

The hæmorrhoidal tumour, if it be one that has descended from within the sphincter, ought to be returned, provided the replacement can be effected with gentle continued pressure, and without giving much pain. This is often most easily accomplished by the patient. Should there be much local distress, a few leeches may be applied with advantage, not, however, upon, but in the near neighbourhood of the tumour. Under this management, even a severe attack subsides in two or three days. The hæmorrhoidal veins collapse, the tongue assumes in a great degree its natural size and appearance, and the appetite returns.

But now another consideration arises. The patient, Mr. R., was recovered, but he had recovered in somewhat the same way from previous attacks. If left to himself, he would again and again have had to pass over the same course of frequent ailing and occasional suffering, until at length there would have been established a lasting local disease. Our task is not accomplished when the attack which has summoned us

to the patient has been subdued. He is not then to be consigned, at least not without admonition, to his old course of life, and his frequent use of drugs. Our duty plainly is, to seek for the source of his malady, and if possible remove it. This brings us to the causes of his suffering, and of the hæmorrhoidal affection.

You will find it stated in books, that enlargement or induration of the liver is a cause of piles; so also, that abdominal tumours, and pregnancy in the female, are severally causes of this complaint. The statement is quite correct. I have had examples of the disease arising from these causes; but in far the greater number of cases the hæmorrhoids exist without any appreciable internal organic change. In the case above cited, there was no such cause. For the origin of the local disorder in our patient, we must therefore look elsewhere. I found that Mr. R. had, for a few years, led a very inactive life; that he was in the habit of sitting in his chambers nearly all day, and up to a late hour at night, only relaxing when he went to dine at his club. He ate a full dinner usually, and drank a moderate quantity of beer and wine. Frequently in consequence of a feeling of fulness and throbbing in his head, which often interfered with sleep, Mr. R., of his own accord, resorted to the use of purgatives, and, under eminent advice, he also took during some time various medicines—among others an alkali with hydrocyanic acid. But these means produced no lasting improvement; and it is not probable that any medicine would have been permanently beneficial while the habits of the patient continued unaltered. For, with such a course of life, while blood was formed, and doubtless in abundance, there was but little demand for it, so to say, except towards the brain and the digestive organs. The muscles of the limbs were little used. The skin was inactive. So, likewise, judging from the torpor of the bowels and the character of the evacuations, was the liver. By such circumstances, the congestion of the head and of the alimentary canal may be reasonably accounted for.

But how was relief, and that as permanent as possible, to be afforded in such a case? My answer is, Not by the continued use of drugs, but by attention in detail to the various circumstances which conduce to the maintenance of a healthy state of the system. Thus: while the diet is regulated—made more moderate in quantity, as well as less stimulating—the skin is to be thoroughly cleansed by daily ablution. Active exercise is to be taken for, at least, a couple of hours each day, afoot or on horseback; and the effect of this, it is to be borne in mind, is all the more salutary if a degree of perspiration accompanies the vigorous exercise of the limbs. By the action of the skin (which is one of the great emunctories of the system) and the increased nutrition of the muscles, the internal congestion, before adverted to, is removed or prevented; and a feeling of elasticity—of health, in short, is substituted for the former feeling of heaviness and discomfort. During four years, the gentleman whose case forms the groundwork of these observations has pursued this plan, taking his exercise on horseback; and during that space of time he has been free from any recurrence of the hæmorrhoidal affection, as well as from (with only occasional exceptions easily accounted for) the throbbing of his head and uneasiness down the left arm. It is not always easy to convince people that medicine cannot safely be made a substitute for moderation in diet, pure air, and exercise of the limbs—in short, for all the natural circumstances which experience shows to be necessary for the preservation of health. To the person of sedentary habits, the aperient drug gives relief for the moment, as it not only evacuates the bowels, but also unloads the blood-vessels of the abdomen in a degree, by exciting a watery or serous discharge from them. When absolutely necessary, and for an occasion, the purgative is as salutary as it is an efficient aid in the removal of the attack of illness. In this way, it is really beneficial,—not so, however, its continued use. Besides, the fact is not to be overlooked, that the frequent resort to aperient medicine creates a strong desire for the continuance of the practice, owing, it is said by those who experience the effect, to the sense of "ease and lightness" it occasions. So, in time, a habit is created—one, too, as difficult to be got rid of as any other habit. Our patient admitted, that, for several years, he had commonly taken purgative pills with senna draughts or castor-oil once or twice a week; and that, when leaving home, he used to consider medicine of that kind as much a necessary part of his luggage as any portion of his wardrobe.

I have now adverted in general terms to the plan of management, dietetic and medicinal, that it is proper to pursue. In actual practice, all must be stated in detail; and it is best, in most cases, that the instructions for diet and general management should be written down, as well as those for medicine. Remember that, as much of the illness which is suffered is induced by the common things with which we are all constantly surrounded and influenced, so the relief and prevention of the evil is, in a great measure, to be obtained by the direction and control of these. Common things must be carefully attended to by the practitioner; uncommon things will command attention. Upon this part of the subject I have dwelt at greater length to-day, in order that it should not be necessary to return to it upon another occasion.

We have now had before us a case in which the local treatment was of the simplest kind. There was no operative interference. Had the attack been more severe, the local suffering greater, it would have been useful to apply leeches, as mentioned in a former part of this lecture; or relief may, in similar circumstances, be afforded by puncturing the tumours. This expedient relieves by removing the distension. Again, a degree further of interference becomes necessary, with a slight additional increase or alteration of the local malady. This condition is illustrated by the case of a gentleman to whom I was summoned some time since. Mr. H., the gentleman alluded to, having been engaged very closely in a course of investigation into an important scientific subject, had been very negligent of his health, and, in consequence, became affected with an acute attack of hæmorrhoids. The tumour, a round venous-looking mass, became very hard, and was intensely painful. The hæmorrhoid was, in fact, strangulated. This state is met with in various extent, and with a very various amount of suffering. It is remedied, not by puncture, but by free incision of the swelling. When the hæmorrhoid is divided, a clot of blood is turned out, and much relief follows. The part cicatrises in the usual way, and the cure of that tumour is complete. If, however, the inflamed hæmorrhoid should not be interfered with by the surgeon, it is, nevertheless, closed by the adhesive process, and the swelling subsides on the subsidence of inflammatory action. But the suffering in these circumstances is more protracted, and a degree more of thickening commonly remains afterwards.

We are now to proceed a step further,—from the form, that is to say, of hæmorrhoidal disease, in which the altered condition of the vessels of the rectum is a part as well as an indication of a more general malady, and disappears without operative interference on the part of the surgeon, or with but little, to a more advanced form of the complaint, in which the hæmorrhoid is become a substantive disease requiring local management, and, for the most part, remaining permanently, with more or less inconvenience to the patient. The vessels here are more than dilated. Their walls are thickened in consequence of the repeated inflammatory attacks to which they are subjected. They become tortuous as well; and there is often added a deposit of fibrinous matter, by which the parts of the twisted vessels are glued together, and an indurated tumour is formed. The process of change last adverted to, occurs most extensively in external piles.

Many persons continue through life to suffer inconvenience from hæmorrhoids in this condition; and, if the inconvenience be not considerable, or if their presence be not attended with effects otherwise injurious, as for example with much pain or bleeding, it is best, as regards local management, to resort to palliative means only. Like most other parts that are not in a natural or entirely healthy state, the hæmorrhoids are liable to be affected by attacks of general ill health. As the joints of the gouty man, the morbid urethra of another, or the tender eye-lids of a third, suffer especially in case of even slight general derangement, so do the thickened hæmorrhoidal vessels partake in the general disturbance. It is not that the gouty joint or the hæmorrhoid is alone diseased, but that, being previously in an altered state, these parts respectively take on diseased action more abundantly than other ordinarily sound structures. Moreover, as it is the digestive apparatus which suffers most frequently in slight ailments, as from irregularities of diet for instance, the hæmorrhoids, on account of their direct connexion with the vascular system of the alimentary canal, are influenced by the general excited or altered action of the part; and they therefore often become a source of inconvenience, being in the intervals of such attacks quiescent.

A case known to your Professor, Dr. Sharpey, may be briefly mentioned, as apt to our present purpose. A gentleman now advanced in life has been habitually subject, since he was a young man, to bleeding from hæmorrhoids. These are not otherwise troublesome, and the hæmorrhage has not been considerable in amount. Such circumstances are so common as to be almost daily met with; but there is here one peculiarity worthy of notice, namely, that this gentleman has always been able to predict the occurrence of the hæmorrhage. He is enabled do this from having long observed, that a peculiar feeling of general discomfort and fulness, as well as a change of the colour of a spot at the root of his nose always usher in the discharge of blood. The spot—a vascular one—at the times adverted to becomes red, *i.e.*, it is perceptibly deepened in colour. Relief from the general uneasiness is obtained when the bleeding takes place; and at the same time the little index-spot resumes its ordinary appearance. Whether the loss of a small quantity of blood actually occasion the improvement in such circumstances, or the hæmorrhage but indicate the alteration in the state of that fluid which probably accompanies the cessation of disease, or whether both these modes of viewing the subject be in part theoretically correct, it is not material to the present purpose that I should stop to inquire. It is enough to say, that there is here another proof that the hæmorrhoid is to be regarded as part of a general ailment; and at the same time the case well illustrates that degree of the hæmorrhoidal disease and of hæmorrhage which it would be improper to interfere with But to the evils of interference in unsuitable cases we shall return hereafter.

For the general management of the class of cases alluded to in the foregoing observations, the rules laid down in a former part of the lecture are applicable. An acute attack is conducted to its termination in the same way. When the state of the local malady admits it, active exercise is to be taken, so far as the condition of the patient's strength allows. The same attention to the state and the functions of the skin is required; so likewise is the same watchfulness respecting the quantity and the quality of the food to be observed. But, even with good management in these respects, habitual sluggishness of the bowels often accompanies the hæmorrhoidal disease. The use of aperient medicines then becomes necessary. When resorted to, the aperient medicines ought to be such as unload the bowel with the smallest degree of irritation. Saline aperients are seldom applicable. They have a tendency to increase flatulency, which is often a troublesome accompaniment of constipation. The medicines characterised as drastic are likewise, for obvious reasons, to be avoided. The electuary of senna, with various additions, has long been in use to relieve the constipation; and, in a large proportion of cases, it answers the purpose very well. When this medicine proves insufficient,—and I have not infrequently found it so,—castor oil may be administered as occasion arises, or the purgative quality of the electuary may be augmented by admixture of other aperients. To such medicines, the enema of tepid water, used daily, will be a useful auxiliary; or this means, should it prove adequate to the purpose, may take the place of all other remedies. But, at the same time, it is expedient, that no effort should be wanting to attain the end in view, by the management of the diet, and attention to other natural circumstances, rather than by direct action on the canal. either by the use of drugs or of the other expedient adverted to. Such means as the foregoing are, it is to be understood, applicable in cases in which the hæmorrhoidal affection is unaccompanied with evidence of congestion of any important organ,—the liver, for instance; where disease of this kind exists, suitable remedies for its removal will of course be used, but they fall within the domain of general medical treatment, and need not be specified in this place.

As regards the local means to be had recourse to:—The hæmorrhoid, if it has been protruded, must be carefully replaced after each descent: first, however, the swelling is to be sponged with cold water, and it will be advantageous to use also an astringent application in the form of lotion or unguent. An ointment of nut-galls is a very old and popular remedy, and I have known it favourably spoken of by patients. The acetate of lead and watery extract of opium made into an ointment, seem to have a beneficial effect. But, if there be any excoriation of the surface, most medicated applications do harm, by irritating the part. The continued use of the bougie has been recommended, in hæmorrhoids of this kind, but I have never resorted to the practice. In conveying to you the opinion I have formed respecting this method of treatment, I must first observe, that the fact of the condition of the patient being improved during the time that the bougie is being passed, cannot be accepted as proving that the amendment is owing to the instrument, for amendment takes place in similar cases without this expedient; and I do not see how we are to expect temporary pressure to be beneficial as regards the varicose condition of the hæmorrhoidal veins, when even continuous pressure upon the veins of the foot or leg in a varicose state is known to serve for no more than a support while it remains applied, not in any case for a cure. I have had under my care lately a young lady who had during the nine previous years suffered often and much from hæmorrhoids. When I saw her she was under thirty years of age, and she had long been in the habit of using a metallic instrument three inches in length, calculated to make pressure upon the swelling, and as effective pressure as could be made with a bougie. There was no prolapsion in this case, except of the kind which commonly attends internal hæmorrhoids; and to this extent it occurred only during the acute attacks, which were not frequent. The use of the apparatus had not been attended with any beneficial effect. To these objections it must be added, that the continued passage of any instrument, unless where an absolute necessity for its use exists, is to be deprecated; for the patient's mind becomes thereby fixed upon the malady as well as upon the idea of the mechanical treatment, and an additional difficulty in the management of the case is to be overcome.

My object in this lecture has been, to show that hæmorrhoids are to be regarded, not merely as a local disease, but as part of a more general ailment, and to illustrate the form and degree of the complaint in which a surgical operation for the removal of the hæmorrhoid is not required and not justifiable. The next lecture will exemplify the circumstances under which an operation becomes necessary.

ORIGINAL COMMUNICATIONS.

ON SULPHURIC ACID AS A CURE FOR DIARRHŒA.

By HENRY WILLIAM FULLER, M.D., Cantab.,

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Among the various medicinal agents in the Pharmacopœia, none, according to ordinary notions, seems less likely to check an attack of diarrhœa, and to relieve the griping which attends it, than sulphuric acid. Causing, as it often does, uneasy pinching pains in the abdomen, and not unfrequently a tendency to purging, it affords but little prospect of relief in a complaint of which these are prominent features. Acting, too, as it does, most strikingly as a refrigerant, it seems ill calculated to alleviate a disorder which in its severer forms is characterised by alarming collapse. Nor do the other symptoms of the disease hold out any greater encouragement for its administration. The furred and yellow tongue, the sour taste in the mouth, and the acid state of the matters rejected from the stomach, appear to contra-indicate its use, and to afford a guarantee for the soundness of those views which have induced the Profession to rely upon calomel, opium, chalk, and other medicines, having a tendency to allay the morbid irritability of the stomach and bowels, to counteract the extreme acidity of the primæ viæ, to improve the character of the secretions, and to carry off any acrid and offending matter, which might serve to keep up existing irritation. So obvious indeed are these indications for treatment, and so general the adoption of a remedial course founded upon them, that few persons have had recourse to any other remedies. Some, indeed, who value the labours of their predecessors, and have consulted Dr. Pemberton's admirable work on the abdominal viscera, may have remarked, that when speaking on the subject of diarrhœa, he recommends the administration of large and repeated doses of the sulphate of alumina, when chalk and catechu and other similar medicines have failed. Some, too, there are, who, acting on local or family traditions, have employed the compound infusion of roses, with small doses of the sulphate of magnesia, as a cure for diarrhœa and its attendant evils. But neither Dr. Pember-

ton, nor the various practitioners just alluded to, have attributed the successful issue of their treatment to the agency of the sulphuric acid, which, either free or in combination with a base, has formed an ingredient in their various prescriptions. Indeed, the only notices we possess of the marvellous efficacy of this remedy in diarrhœa are contained in the original letter from Mr. Griffiths, published in the *Lancet* about three months ago, and in one or two brief statements in the journals within the last few weeks. The record, therefore, of the following severe cases in which I prescribed it, without admixture with any other medicinal agent, and in which its effects were closely watched by many pupils of the hospital, and by other persons interested in the result of the treatment, may serve to direct increased attention to a remedy which is destined, I believe, to effect a complete revolution in our treatment of this troublesome, and not unfrequently dangerous, class of maladies.

Thomas Goodwill, aged 49, a gentleman's servant, was admitted into the Fuller ward of St. George's Hospital, on the 6th of September, 1851. He had been quite well the previous night: his bowels had acted comfortably; and he had eaten nothing likely to disagree. Such was his history up to 7 a.m. on the morning of his admission, when he was seized with severe pains in the bowels, cramps in the extremities, vomiting, and pale, watery purging.

At 11 a.m., when he applied for admission into the hospital, these symptoms continued with increased severity; he was doubled up with pain in the belly, and his extremities were drawn into knots by cramp. Indeed, so excruciating were his sufferings, that he had to be carried up to bed. His countenance was anxious, his features were pinched and drawn, his extremities icy cold. His tongue was very dirty, and dry in the centre, but moist at the edges; his pulse rapid, small, and very weak; his urine scanty, pale, or indeed almost colourless. He was ordered, as a draught to be taken every hour—

Acidi sulphurici diluti ℿxx.; aquæ ℥iss.

He vomited about a quarter of an hour after taking the first draught; but, after taking the second, which he did immediately on the rejection of the first, he neither vomited nor was purged, and when I visited him at 1 p.m., he was quite warm, and comparatively free from pain. I therefore ordered the medicine to be repeated every second hour only.

At 4 p.m., I found him warm and perspiring, and almost free from pain. He had been sleeping quietly for about an hour and a half; his bowels had not acted again, nor had there been the slightest return of nausea or vomiting. The medicine was, therefore, repeated at still longer intervals, (every three hours,) and was omitted altogether for a time, during the action of a rhubarb draught which I ordered him to take in the evening.

On the 7th, (the following day,) I found that he had passed a comfortable night, and had slept well. There had been no return of the pain, nausea, vomiting, or purging. His bowels had acted once after the rhubarb, and his tongue was much cleaner.

Rep. haustus acidus 6ta quâque horâ. Haustus rhei cras mane.

On the 8th, he was quite well; but I kept him in the hospital until the 9th, lest there should be any recurrence of the symptoms. Such, however, was not the case; and he was therefore discharged on the morning of the 9th.

The other case is of the same character.

Charles Hanscomb, aged 64, was admitted into Fuller ward, at 1 p.m., on the 9th of September, 1851. His attack, which had not been preceded by any disorder of the bowels, nor by any irregularity nor imprudence of diet, commenced suddenly on the night of the 7th, with vomiting, purging, and crampy pains in the abdomen. During the thirty-six hours which elapsed between his seizure and his admission into the hospital, he had no medical advice, and the symptoms, which at first were comparatively slight, increased gradually in severity, and became accompanied by violent cramps in the extremities.

On admission into the hospital, his features were collapsed; his face was of a bluish tinge; his expression anxious. His extremities were icy cold, and had lost all power of sensation; his breath also was cold, and he was shivering violently. Indeed, he stated that he had not ceased shivering during the last six hours. His tongue was yellow and furred, and rather dry; pulse 100, extremely weak. He was vomiting and purging incessantly, and, indeed, vomited once and was purged once during the short time which elapsed before he could be got into bed. The dejections were pale and watery, and the matters rejected from the stomach acid and almost colourless.

I ordered: Acidi sulph. diluti ℿxxv., aquæ ℥iss. M. ft. haustus statim sumendus et omni horâ repetendus ad tres vices.

At half-past three p.m. I found him warm and perspiring, and comparatively free from pain. He had vomited about twenty minutes after taking the first dose of the medicine, but a second dose was then immediately administered; and since that time there had been no return of nausea or purging, and the cramps had entirely ceased.

Rep. haustus acidus 2dis horis tantum.

Six p.m.—No return of vomiting or purging, and has no longer any pain in the abdomen or in the extremities.

Rep. haustus acidus 6tis. horis si opus sit.

Sept. 10.—Slept soundly all night; omitted the medicine after the first five doses, and has had no return of pain, sickness, or purging. Feels quite well, and is going to leave the hospital this morning, the tongue being moist and almost clean, and the bowels having acted once comfortably.

I have thought it right to give the above details, as entered in my case-book, without comment; but I would add, in explanation, that I have seldom seen more alarming cases. In both instances the collapse was very great; in both the breath was quite cold, and the cramps in the abdomen and in the extremities were very severe: in both the tongue was exceedingly furred, the urine was nearly suppressed, and the alvine evacuations were pale and watery. No cases can be conceived less likely, *à priori*, to be benefited by the administration of sulphuric acid; yet in both the happiest results ensued. No vomiting nor purging occurred in either instance after the second dose of the medicine, or, in other words, after the treatment had been continued half an hour; and at the expiration of an hour and a half, when three doses had been taken, the patients were warm and comparatively well. In the first case seven doses of the medicine, and in the second five doses only were given; and in the first a rhubarb draught was administered only because my preconceived ideas had led me to imagine what subsequent experience has proved not to be the fact, viz., that the administration of some purgative is necessary to carry off offending matters from the bowels.

Since the cases just detailed fell under my care, I have had ample opportunities of testing the value of sulphuric acid in diarrhœa, and I can speak confidently as to its curative power in such cases. I have administered it in private practice, and in my practice at St. George's Hospital, to twenty-seven patients, the whole of whom, with three exceptions, derived immediate and striking benefit. The sickness speedily abated, the purging ceased, and the pain in the abdomen shortly subsided. In the three instances in which it failed to produce its ordinary curative effect, there had been considerable disorder of the stomach and bowels for many days before the attack. Two of the patients had been exceedingly costive and bilious for above a week, and had previously suffered from occasional relaxation of the bowels, with dark-coloured and offensive motions; and the other patient had been suffering from alternate constipation and relaxation of the bowels for a period of more than three weeks, and had taken large quantities of chalk mixture.

In a practical point, the value of this remedy is greatly increased by its being so cheap, so extremely palatable, and suitable to all ages. By charitable institutions for the relief of the sick poor, it can be largely employed at very little cost, and by the youngest person it will be taken, when mixed with syrup, without the slightest repugnance. In five minim doses, I have given the dilute acid to a child of 16 months old with perfect success; and I have known it given with the happiest results to children of a still more tender age.

The only question of doubt or difficulty is as to the class of cases in which it is most serviceable, and whether it is positively injurious in any. I have already pointed out the nature of the cases in which it has failed in affording relief: and I may add, that its effects have appeared to me remarkable, in proportion to the suddenness and severity of the attack. Severe attacks, which commence suddenly during the prevalence of an epidemic influence, without any previous derangement of the stomach, and which are accompanied by depression and by severe crampy pains in the abdomen and in the extremities, are certainly checked far

more rapidly by the acid than by any other treatment, however active. But an attack of ordinary bilious vomiting and purging, which has been preceded by derangement of the primæ viæ, is relieved, I believe, by calomel and opium, followed by a rhubarb draught, and by some warm antacid and astringent medicine, as quietly and effectually as by sulphuric acid. Indeed, in such cases, I have been induced to give a decided preference to the older and more complex method of treatment.

The question whether the acid may not sometimes prove injurious, can only be answered satisfactorily when we have more extensive data for an opinion; and I trust that all gentlemen who have had any experience of the effects of the acid in these cases, will make known the results of their observation. My own experience does not lead me to anticipate any mischievous result from its cautious exhibition, nor among those of my friends who have administered it largely can I hear of an instance in which it has proved injurious.

13, Manchester-square, London.

OBSERVATIONS ON ARTIFICIAL PUPIL;

WITH A DESCRIPTION OF A NEW METHOD OF OPERATING IN CERTAIN CASES.

By WILLIAM BOWMAN, Esq., F.R.S.,

Professor of Physiology in King's College, Fellow of the Royal College of Surgeons, &c.

[Concluded from page 14.]

Case 3.—Feb., 1851.—John Griffith Jones, aged 45, able seaman, sent over by Captain Bathurst from the Bay of Honduras, where he has been stationed twenty-six years, under the following circumstances:—He had lost the left eye, in 1831, by a shot. Globe collapsed. The right eye was perfect till June, 1850, when it became inflamed. It was without sight till November. He was salivated and actively treated. In November he began to see a little, and was sent over for the purpose of having something done in England.

Present State, Feb. 15.—Right cornea semi-opaque and uneven on the surface in the central third, opposite the pupil, and also above. At the sides and below, it is clear and natural. When the pupil is dilated by shading the eye with the hand, he can just see the large letters "on them 'buses." I dilated the pupil with atropine, and found he could then see minion type through a pin-hole in a card. As all ophthalmia had subsided, I decided on making an artificial pupil downwards, and a very little outwards, in order that he might afterwards use the pin-hole. Fearing to enlarge the pupil too much, I determined to operate as follows:—I made the puncture near, but not close to, the margin of the cornea, at the lower and outer part,—introduced Tyrrell's hook, caught the border of the pupil,—taking care to engage it but very little in the hook,—and, withdrawing it, left the iris in the puncture, by disengaging the hook, without, as usual, cutting off the iris with the scissors. The pupil seemed all I could wish.

The lids were closed, and the eye looked at three days after, all being quiet; but, to my disappointment, I found the iris had slipped back into the aqueous chamber, and had resumed its natural place. The pupil was more contracted than before, but was active; there was no inflammation at all. The corneal puncture was closed, and the aqueous restored.

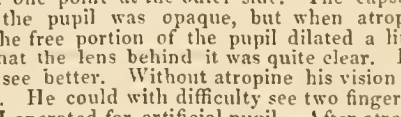
After the lapse of a week, his time being limited, I again operated as follows on the 27th. I punctured the cornea close to the old place, but a little higher, for I feared, if I passed through the former puncture, the wound might not readily heal. As the needle was piercing the cornea, the old puncture gave way, and the aqueous escaped, so that great care was required in passing the needle completely in, not to wound the iris or lens. The hook was then introduced, the pupillary border caught, and withdrawn as usual. A small piece was now cut off.

Three days after, all was perfectly quiet. The iris remained attached to the cornea, not only to the last puncture, but also to the previous one, and a pupil resulted which was quite what I expected. (See *Fig.* 3.) He could now see much better than before, could walk without help along the crowded streets, and, with the help of a pinhole, could see very small type. No inflammation followed, and, the lens remaining transparent, he sailed on the 14th March. He had already found that he could see to read medium type by closing the eyelid a little; and I observed that in doing so the pupil was partially covered.

From the issue of some previous cases similar to this, in which I thought that the patients might have had more sight restored, had the pupil been kept smaller and more central, I tried the plan of making the puncture in the cornea less near the margin, so as to limit the pupil outwards, and hoped, by more carefully restricting the size of the corneal puncture, to insure the retention of the iris in the wound. If this last expectation had been fulfilled, it is probable that the sight would have been much superior to that otherwise resulting; but the following case convinced me that there was no certainty of securing this adhesion of the iris to the wound through which it had been prolapsed, and that, if it did retreat when the puncture had been thus made at some distance within the corneal margin, the nebula probably resulting must stand in front of the pupil, and thus add to its other defects. The case, though one of posterior synechia, bears exactly on the point in question. The subject of it was one of the Chinese at the junk, then at Blackwall. Notes were kept by my friend Mr. Lynch.

Case 4, April 5, 1849.—Allauck, aged 24, has been in England eighteen months. About eight months ago contracted syphilis, and was treated at the Dreadnought Hospital ship. Four months ago had syphilitic iritis, and when it had continued some time, he was again taken to the Dreadnought. Though the most skilful treatment was employed, it ended in the destruction of the left eye, and only the very partial recovery of the right. Its pupil was much contracted, and adherent by lymph to the crystalline capsule, except at one point at the outer side. The capsule in the area of the pupil was opaque, but when atropine was applied, the free portion of the pupil dilated a little, and showed that the lens behind it was quite clear. He could then also see better. Without atropine his vision was very imperfect. He could with difficulty see two fingers.

27th.—I operated for artificial pupil. After atropine, the small free margin was caught by Tyrrell's hook, drawn out, and a piece cut off. The puncture was made about a tenth of an inch within the margin of the cornea, in order to limit the pupil outwards. (See *Fig.* 4, *a p.*)



On the 28th, the pupil was as in *Fig.* 4, *b*. The iris had receded, had opened out, and the puncture was in front of it.

On the 29th, blood was effused into the aqueous chambers, filling them, and obscuring everything. A blister and purge. Being much depressed in spirits, he was allowed to return to the junk at his urgent request.

May 17th.—Comes with the blood all absorbed, and a good clear pupil. (*Fig.* 4, *c.*) The cicatrix of the puncture is, however, slightly nebulous, and in front of the pupil. Still he can see to read and write Chinese characters, and has inscribed his name in the case-book.

I shall now adduce two cases illustrative of a very common class, in which the operation with Tyrrell's hook is very defective, and the evils of the large eccentric pupil it is so apt to make are displayed. I give them in order that the same operation may not be repeated in similar instances, but that another shortly to be mentioned may be substituted. In these cases the whole, or a considerable portion of the pupil, had a nebula in front of it, through which some degree of vision was possible, and when the pupil was dilated with atropine, or even by shading the eye, vision was much improved; for not only was more light admitted, but the pupil extended either beyond the nebula, or behind a part less dense. Hence an enlargement of the pupil was indicated (for the position in life of the poor precludes their having constant recourse to atropine), and that with Tyrrell's hook seemed at that time the most simple and suitable.

Case 5.—April 8, 1850.—John Scott, aged 39, labourer, having had the right eye lost after birth, came with acute inflammation and onyx of the left cornea, for which I treated him in the usual way.

On the 31st May the inflammation had quite disappeared, and there was a leucoma in front of the lower half of the left pupil, and above this a nebula (see *Fig.* 5 *a.*) The iris was adherent below to the leucoma. Sight was improved by atropine, under which the pupil surmounted the nebula. The cornea being quite clear on the outer side, I determined to give him a chance of improvement by enlarging the pupil outwards. This was done as usual: the operation was perfectly simple. A little blood lay afterwards in the anterior chamber, but in two days this was cleared away, and the eye was recovered.

On June 8, the condition was as in *Fig.* 5 *b.* It is interesting to note the following observations as to the result on vision of this operation:—

On the 29th June, he could see better through the central part of the pupil than through the lateral part, when they were alternately covered by a card, although the nebula was in front of the centre, and the margin was clear; and yet I found that the operation had decidedly improved his sight. It had done so, by allowing the upper border of the pupil to rise much more freely behind the nebula when the eye was shaded than it could do before.

This note is appended in the case book:—"I will think of slitting the edge of the old pupil above, so as to enlarge it centrally and above, it being evident, that a central pupil behind a nebula is better than a marginal one behind clear cornea."

Case 6.—June 6, 1850.—John Russell, aged 25, has leucoma in each eye from variola in childhood. In the right it is central and large, and the rest of the cornea is nebulous. In the left it is at the lower part of the cornea, but a nebula extends from it upwards in front of the whole pupil (*Fig.* 6 *a.*) The sides of the cornea are clear. There is a central speck on the capsule of the lens, seen even through the nebula. His sight with this eye is very imperfect, but improves under atropine, which dilates the pupil beyond the margin of the nebula (*Fig.* 6 *b.*)

I enlarged the pupil downwards and outwards as represented at c. The cutting needle was introduced close to the margin of the cornea, and close to the leucoma. With Tyrrell's hook I drew out the iris where it was stretching up to a point of adhesion to the leucoma. Its texture being brittle, it tore. I did not cut off any. I introduced the hook three or four times to endeavour to extract more, and succeeded partially, leaving some entangled in the corneal puncture.

10th.—No inflammation followed. (Pupil shown in *Fig.* 6 c.) This patient was very little improved. He could see

better through the central part when the pupil was dilated with atropine than through the lateral part of the pupil when the central part was covered.

The reason of the little benefit done by the operation in these cases seems evidently to be this, that the nebula in front of the natural pupil allowed still of vision through that part, so that the pupil, as altered by the operation, was a very large one, including the old central and the new marginal part, and was thus extremely defective, according to the principles laid down above.

These cases especially impressed me with the importance of a central position for the pupil, and determined me to endeavour to find some means of enlarging the natural pupil to a limited extent in a suitable direction, still keeping it as central as possible, rather than of drawing it out with Tyrrell's hook to the margin of the cornea. I was, therefore, much pleased to see the small scissors which M. Luer exhibited here last summer;(a) and it immediately occurred to me, that this admirable instrument was likely to fulfil some important indications in a superior degree to any other yet invented.

These scissors consist of delicate blades, about a quarter of an inch long, expanding from a stem which is moved up and down a canula of the size of a cataract-needle by means of a spring in the handle. When the spring is pressed, the scissors are closed by being drawn partly into the canula; and when it is relaxed, they open by being protruded by a spiral wire concealed in the handle. The blades of the scissors are pointed, and one of them projects beyond the other and has a cutting-back edge; so that it is capable of piercing the cornea or sclerotica, and allowing the whole instrument (closed) to be introduced within the chambers of the eye. When within, the blades may be opened and made to cut iris or capsule of the lens, by means of the spring in the handle. The canula and scissors are so adapted in size to each other, that the canula quite fills up the wound which the scissors make in the cornea, and thus the aqueous humour is prevented from escaping while the scissors are at work within.

With the view of adapting these scissors more perfectly to the operation for artificial pupil which I meditated, viz., to snip the border of the pupil at a given point without risking the lens,—I requested M. Luer to shorten the blades by almost one-half, and to make the shorter of the two blades blunt-pointed instead of sharp-pointed. I required the blades shorter in order that they might work in a smaller space, and one point blunt, in order that it might be passed behind the iris, and not puncture the capsule if it touched it. With this modified instrument, I operated as follows in the next case that presented itself.

Case 7.—October 3, 1851.—Edward Bush, aged 36, lost the left eye by a blow three years ago; four months ago had severe inflammation with sloughing of the cornea in the right eye. At present there is a dense leucoma occupying the greater part of the right cornea. The iris is barely visible below, and the leucoma extends over the centre, obscuring the pupil. When the eye is shaded so as to dilate the pupil, it rises a little above the leucoma, and his sight is considerably improved. Still, the cornea is slightly hazy above the leucoma, to nearly its upper margin. The lens appear to be *in situ*, and perfectly clear. The lower edge of the pupil adheres to the leucoma.

The patient being placed as usual on his back, I introduced the scissors at the outer side of the cornea, where it was very nebulous, and pushed them on as far as the existing pupil, where it lay almost, but not quite, obscured by the leucoma, for atropine had been applied. The shorter, blunt-pointed blade of the scissors was then passed behind the upper border of the pupil, and the long sharp-pointed blade in front of the iris; and, the spring being pressed, the blades closed and cut the upper margin of the pupil to the extent of about 1-16th of an inch. Though the hinder blade must have touched the lens, this was not wounded. No blood flowed to discolour the aqueous humour; and the man, sitting up, could at once see the trees and distant houses through the window. No inflammation ensued, and he returned to the country.

p, site of puncture of cornea. The line extending from the pupil shows the incision by the scissors, but is rather too long. The second diagram represents the pupil after the first operation.

Early in November he came back for inspection, and his sight continued much improved; but as he stated that he saw more distinctly when the eye was shaded, and it was found that the pupil enlarged slightly upwards when that took place, I resolved to repeat the operation, and to divide the iris at the same point, but to a slightly greater extent, so as to place the pupil permanently in the condition in which it was thus found to serve most efficiently the purposes of vision. This was accordingly done, and the pupil enlarged by a second cut. The operation was exceedingly simple, the aqueous not escaping, and no bleeding attended it. He left the hospital two days after. A minute strip of iris remained between the two cuts which had been made in it. When this shrinks, the man's sight will doubtless be much improved.

No inflammation or opacity of the lens followed this second operation, which shows how much may be done with safety with this delicate instrument.

These scissors may be used also with advantage through

(a) These and other analagous instruments may be obtained at Weiss's.

the cornea to make an opening in the iris when the pupil is obliterated by prolapse, after the extraction of cataract; and indeed, I think, that while they enable us to make the pupil as central as possible, to define its extent, and to save the lens when present, and all this with a mere puncture of the cornea, they must supplant altogether the iris scissors of Maunoir, which require a large incision in the cornea, do not enable the surgeon to limit the pupil as he desires, and are very apt to wound the lens, induce cataract, and mar the elegant results of the operation as produced by the canula scissors.

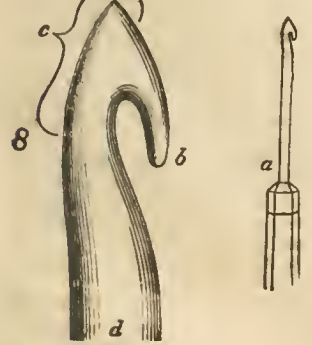
Mr. Tyrrell employed his hook to make an artificial pupil in some cases of conical cornea, an operation which has been abandoned probably by most surgeons, on account of the inconveniences already detailed as attendant on the use of this instrument, inconveniences which must have been even greater where the pupillary border was entirely free, than where it was partially adherent to a leucoma. I should not now hesitate, in a suitable case of conical cornea, to introduce the canula scissors, and to incise the pupillary border at such a point as to enlarge the pupil by the resulting gaping of the incision, opposite a part of the cornea near the centre, which was more fitted than the irregular apex of the cone to transmit a true refraction to the lens and retina.

I would also recommend the use of these scissors to enlarge the pupil where the cornea is thickly nebulous, not leucomatous, and where vision is much improved by dilatation of the pupil. The constant use of atropine greatly improves sight. By snipping the pupillary border at two or three points, and to a slight extent, the pupil is permanently enlarged, but at the same time kept central. The operator need not hazard the lens, and the danger of inflammation is trivial. Such cases are numerous, and have not admitted of relief by any operation hitherto devised. The operation would be performed much as in *Case* 7. The scissors introduced below might snip the outer and inner margin by being turned to each in succession.

I may add, that these scissors are also extremely useful in cutting across bands of opaque tough capsule, which are often very hard to deal with by the ordinary cutting needle. This use of them is exemplified in Case 2.

Notwithstanding what has been above advanced as to the disadvantages of the operation with Tyrrell's hook under ordinary circumstances, there will remain certain cases in which some such instrument will be useful. For example, where the whole cornea is leucomatous except one small marginal spot, the pupil must be made behind this spot, and the smallness of the spot will limit the pupil, so that a large opening in the iris would be of little consequence. Again, in cases like those above related (Cases 1 and 4), where, with synechia posterior, a small point of the pupillary border remains free, it will be desirable to hook it and draw it outwards, so as to make the elliptical pupil, which has been shown to be so serviceable. Here the iris readily tears rather than the adhesion to the capsule should give way, and the hook answers well; nor could the scissors be employed.

But, to obviate the defects already alluded to, even in cases to which a hook may still be applicable, I have contrived the following needle-hook, which has been made for me by Mr. Weiss. (See *Fig.* 8.)



a, size of needle-hook.
b, blunt-hook (enlarged view.)
c, cutting edge.
d, stem.

Of the general size of Tyrrell's hook, it is sharp and flattened at the point, and the stem is cylindrical, and of such a size as exactly to occupy the corneal wound, and effectually prevent the escape of the aqueous humour during the operation. There is a slit on one margin near the point, running up towards the point, and making the terminal part of the instrument a hook as well as a needle. The cutting edge extends from the point as far as the shoulder on the side opposite the slit; while, on the other side, or that which must be turned towards the lens in seizing the pupillary border, the edge is cutting only close to the point, and the convex part of the hook, that might touch the capsule, is blunt.

With this instrument, no previous puncture with a needle is requisite. The needle-hook introduces itself, retains the aqueous humour, and brings out the iris, while it is calculated to insure the safety of the lens as much I believe as Tyrrell's hook. In fact, the retention of the aqueous humour by maintaining the exact position of the iris and lens during the surgeon's manipulations, must, itself, go far to enable him to avoid wounding the lens.

The slit may be made of different depths in different instruments, so as to entangle more or less of the iris as desired; and the recess of the slit is cutting in one, for those cases in which it is desirable to slit up the iris from the pupillary border rather than to withdraw or remove a portion with the scissors. In the latter cases, when the iris has been slit up as far as necessary, say one-half of the distance from the pupillary to the ciliary margin, the hook may be disengaged and withdrawn, leaving the pupil much limited in the direction of the ciliary margin.

If it should happen to seem desirable to re-introduce the hook after a first attempt to withdraw a portion of iris, Tyrrell's hook will still be the best instrument, and may be used as a supplementary aid to the needle-hook, which manifestly is not adapted for introduction a second time by the same aperture.

In conclusion, I have pleasure in appending a very interesting case, which has been placed at my disposal by my friend Mr. W. W. Cooper, in which he very ingeniously made an excellent pupil by means of another of the new French instruments. It is as follows:—

Samuel Hill, of Derby, aged 45, a stout, florid man, by occupation a porter, was attacked in February, 1850, with iritis of both eyes, which ultimately led to the closure of the pupils by deposit of lymph. They were contracted to the size of pins' heads, and the iris was much stretched in each. In the lower part of the left pupil there was a clear point, but so small as to be scarcely perceptible.

This man became a patient at the North London Eye Infirmary, and was operated on by Mr. White Cooper, on the 25th of last October.

The right eye was selected as being the worst, and the operation performed was as follows:—A small incision was made with Jäger's double-edged knife through the outer margin of the cornea, a little below the median line; the aqueous humour escaped, but the iris did not bulge into the wound. A pair of extremely fine forceps (made by Luer after the pattern of Charrière) were then introduced, with the blades closed; when in front of the pupil the blades were opened by means of a spring, and a few fibres of the iris at the external border of the pupil, seized, and very gently drawn out of the wound. The rent thus made in the tense membrane, immediately dilated, forming a good-sized oval pupil. (See *Fig.* 9.) Nothing more was required; not a drop of blood appeared, and the eye was closed and bound up.

9

The patient recovered without a bad symptom, and returned home to Derby on the twelfth day after the operation, having regained good vision.

This is probably the first time in which these forceps, intended for the removal of opaque portions of capsule, were used for the formation of an artificial pupil. The wound in the cornea did not exceed an eighth of an inch in size, for the peculiar construction of the forceps enabled them to be expanded when in the anterior chamber. The blades grasped the iris where it was firmly bound down to the capsule of the lens, but without injury to that delicate membrane; and the small portion was withdrawn without any other part of the iris having been touched, much less bruised,—a point of great importance in such cases.

Erratum.—In our last, at p. 14, line 29, *for* "blunt and made catarsetous by the hook," read, "and made cataractous by the blunt hook."

THE NATURE AND TREATMENT OF PUSTULAR OPHTHALMIA,

AS AN ILLUSTRATION OF INFLAMMATION AND THE HEALING PROCESS, IN THEIR SIMPLEST MANIFESTATION.

By T. WHARTON JONES, F.R.S.,

Fullerian Professor of Physiology in the Royal Institution of Great Britain; Ophthalmic Surgeon to University College Hospital, etc., etc.

In its simplest and most uncomplicated form, pustular ophthalmia is characterised as follows:—The sclerotic conjunctiva, at some distance from the margin of the cornea, presents a small spot of inflammatory injection; the injected vessels often appearing to the naked eye as if isolated from all connexion with any neighbouring ones. There is thickening of the conjunctiva in the situation of the injected spot, and in the centre of it some exuded matter. By this a pustule tends to be formed, but the epithelium, in consequence of its little cohesion, soon gives way, leaving a small abrasion covered with pus or puriform matter.

The inflammation extending, the continuity of the vessels of the spot of inflammatory injection, with those of the rest of the conjunctiva, comes to be distinctly visible. By-and-by inflammatory injection of the conjunctiva generally may supervene, but the injection continues greatest in the region of the pustule, or the abraded or ulcerated surface left by it. Some puro-mucous secretion attends this extension of the inflammation. Thus extended, the *pustular* may be considered to have passed into *catarrhal ophthalmia*.

Inflammatory injection, as observed in the web of the frog under the microscope, consists in an accumulation or congestion of red corpuscles in the blood, within the minute vessels of the affected part. The blood loaded with the accumulated red corpuscles, may, in some of the vessels, still be flowing, though sluggishly, like a thick viscid matter; but in most of the vessels the accumulated red corpuscles are closely agglomerated together, and, being adherent to their walls, block them up, so that the blood is stagnant within them.

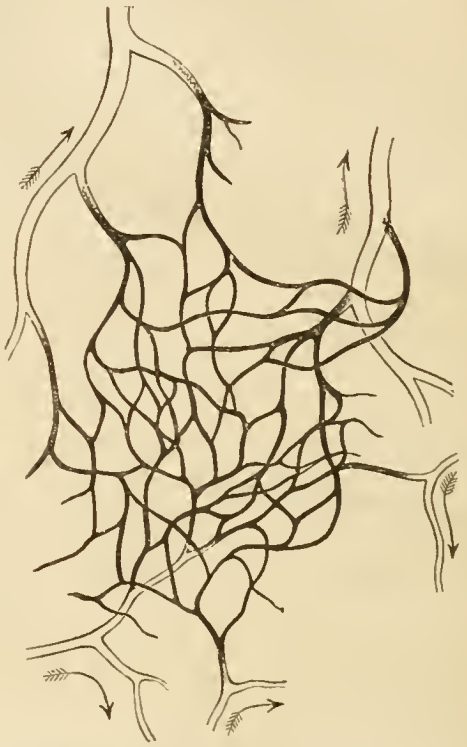
"The vascular injection of the inflamed conjunctiva in man, as observed with the naked eye, or by means of a magnifying-glass, presents the same characters as the vascular injection in inflammation of the web of the frog, as observed by the same means. For this reason, and seeing that the plan of distribution of the smallest vessels in man appears to be similar to that of the distribution of the smallest vessels in the frog; moreover, knowing that the red corpuscles of the blood of man agglomerate together much more readily than those of the blood of the frog, we may fairly conclude that, in the vessels of an inflamed part in man, the red corpuscles of the blood are accumulated and aggregated together in a similar manner, though in a greater degree, to what we can directly observe in the frog. Indeed, if we were to judge from the comparative examination of detached parts of the human body and of the frog, in a state of inflammation, after death, we should expressly affirm the proposition."(a)

Pustular ophthalmia is usually excited by exposure of the eye to a draught of air. As to the mode of action of this cause, "We have seen (to quote again from the same essay, p. 51) that the effect of the direct action of cold on the small arteries of a part, is vital contraction of their walls, and constriction of their calibre, and we have also seen, that when all the arteries of a part are more or less constricted, there is sluggish flow of blood, with great accumulation of red corpuscles in the capillaries and veins, and here and there stagnation. A similar state of the blood and the blood-vessels to that here mentioned, is the only possible one which we can conceive as the first step to inflammation of a part of the human body, from the direct action of cold on it. The bluish redness of the affected part indicates great accumulation of red corpuscles in the blood in the venous radicles,—a state which, under the circumstances, can be owing only to constriction of the small arteries, whereby *vis à tergo* is diminished, and blood loaded with red corpuscles thus allowed to regurgitate into and accumulate in the small veins and capillaries."

The apparent isolation from all connexion with any neighbouring vessels which the spot of inflammatory injection in pustular ophthalmia often presents, I infer, from what I have observed in the frog (Op. Cit. pp., 26—38), to depend on the following conditions.—

1. *On the Side of the Arteries.*—The artery or arteries immediately leading to the injected spot are invisible to the naked eye; being empty of blood, on account of their constriction and the stream from their feeder passing off by a lateral branch at some distance from the spot. Besides, such small arteries are invisible to the naked eye, unless gorged with accumulated red corpuscles.

2. *On the Side of the Veins.*—Those veins with which the venous radicles of the injected spot of conjunctiva communicate, are invisible to the naked eye, in consequence of their not being gorged with accumulated red corpuscles, but having the flow of blood still free in them. See annexed diagram



The increase of the inflammation around the original spot, I infer (Op. Cit., p. 55) to be owing on the one hand to the supervention of dilatation of the arteries leading to it, when it fails to produce resolution, allowing a greater quantity of blood, loaded with red corpuscles, to be poured into the vessels of the affected part than can escape, in consequence of the pre-existing obstruction from stagnation; and, on the other hand, to extension of stagnation in the veins leading from the affected spot. The extension of the inflammation to other parts of the conjunctiva, I infer to take place by the same process as that which led to the inflammation in the first instance, as above described.

The thickening of the conjunctiva in the situation of the injected spot, and especially the pustule or flake of matter in the middle, are manifestations of the exudation which has supervened on the inflammatory injection.

Under the influence of irritating applications made to the eye, the vascular injection speedily disappears, and, at the same time, healing of the abrasion left by the pustule takes place; the spot becoming covered with a new epithelium, while the flake of puriform matter is thrown off.

The following extract, Op. Cit., p. 60, gives a probable explanation of how the result is brought about:—

"We have above seen reason to conjecture, that inflammation of the conjunctiva, for example, from cold, or from the irritation of a foreign particle in the eye, commences by constriction of the small arteries, which allows the blood-corpuscles to accumulate in the capillaries and venous radicles. That in such a case, resolution is owing to dilatation of the

(a) Astley Cooper, Prize Essay on the State of the Blood and the Blood-vessels in Inflammation. In Guy's Hospital Reports for October, 1850, p. 53.

artery, and coincident acceleration of the flow of blood, we have above seen equal reason to conjecture. Nay, we have above shown, by experiment on the frog, that dilatation of the arteries, and the coincident acceleration of the flow of blood, are the first steps to resolution of inflammation,—an experiment, let it be repeated, which is an interesting illustration of the *modus operandi* of stimulating collyria, applied to the eye for the cure of catarrhal ophthalmia."

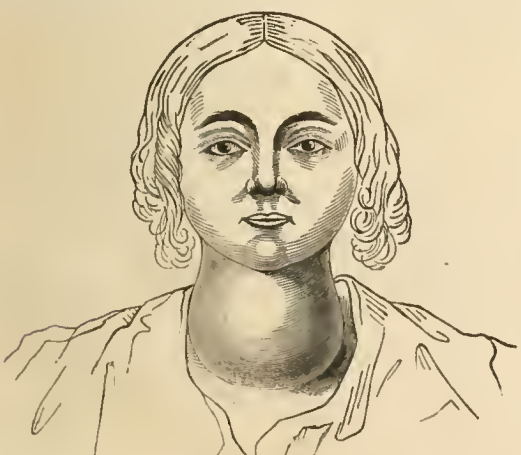
The rapidity with which the cure of pustular ophthalmia is effected, depends on the length of time the inflammation has existed, and the degree to which it has reached. When the vascular injection is as yet confined to a spot, and abrasion of the conjunctiva has not extended beyond the pustule, a single application of a drop of the nitrate of silver solution (gr. iv. ℥j.), or the like, is often sufficient. When the inflammatory injection and the abrasion of the conjunctiva have become more extensive, the application of the remedy may require repetition.

DOUBLE CYSTIFORM BRONCHOCELE OR GOITRE,

CURED BY INJECTION OF IODINE.

By JOHN HILTON, Esq., F.R.S.,
Surgeon to Guy's Hospital.

M. H., aged 26, admitted under my care into Dorcas Ward, April 23, 1851. A single young woman, residing at Storrington, in Sussex; a locality surrounded by hills consisting of a chalky soil. Two of her sisters have had goitrous enlargements of the neck, and she has noticed several persons in the neighbourhood similarly affected. Catamenia first appeared at the age of fourteen, and recurred regularly for three months, then ceased, and did not re-appear before she was twenty-one years of age; since which time she has continued to menstruate, though at irregular intervals. Says, that at the age of fifteen she had enlarged neck; but, on removal to the seaside for change of air, it gradually disappeared in the space of about six weeks. Four years ago a swelling began to reappear in front of her neck, and has continued progressively increasing in size up to the present period. She has frequently been under medical treatment, and has been submitted to the influence of the preparations of iodine, employed both internally and externally, as well as the other remedies usually resorted to in the neighbourhood; for the relief of thyroid enlargements. On the anterior aspect of her neck is a large fluctuating swelling, situated in front of the larynx and trachea, and extending from the os hydoides to the upper part of the sternum, which it overlaps to a small extent.



Laterally it is confined by the anterior margins of the sterno-cleido-mastoidei muscles, and the sterno-thyroid and sterno-hyoid muscles pass over it distinctly. It has given rise to little or no constitutional disturbance; but, from the size it has now attained, it frequently occasions her considerable inconvenience in swallowing, and sometimes embarrassment of the breathing, amounting to slight dyspnœa, on any sudden exertion; her voice is also husky, and she complains of a short, dry, frequent, and hacking cough. It presents no abnormal degree of heat, and obeys the movements of the larynx in the act of deglutition. A few days after her admission, I had the drawing taken by our artist, Mr. Tupper; from which the first engraving has been executed.

On May 5, I passed a trocar and canula into the tumour, as near as possible in the median line, and drew off a quantity of a dark chocolate-coloured fluid. The tumour became flaccid, and emptied on one side, but remained full on the other; I therefore concluded it to be a double cyst, and, without removing the canula, re-introduced the trocar, and directed it through the septum to the opposite side, and in this manner emptied both cavities through a single external opening. The contents of the second cyst resembled in appearance those of the first.

The fluid, which was analysed and examined at my request by Mr. Pavy, measured in all 19 oz.; 11 oz. from one cyst, and 8 oz. from the other. It was of a dark brown colour, and of a thick grumous nature, depositing a brick-red sediment, and containing, floating on its surface, some glittering crystalline scales of cholesterine. Microscopically, it presented shrivelled and altered blood-globules, large granular corpuscles, (inflammatory or exudation cells,) and crystalline plates, or tables, of cholesterine. In its chemical properties, it was slightly alkaline to test-paper; not spontaneously coagulable, but completely solidified on the application of heat. Sp. gr., 1053; 1000 grs. yielded 175·65 grs. of solid residue; of which, 1·99 gr. consisted of fatty matter, principally in the form of cholesterine.

After the operation, I painted a pretty thick layer of collodion over the emptied cysts; hoping, by the contractile properties of this agent, to bring the walls of the cysts in contact, and thus promote their adhesion. This intention, however, was not accomplished, for a few days after the tapping the tumour began visibly to increase in dimensions again, and afterwards so rapidly re-filled that, in a month's time, it had nearly attained it original size. I therefore determined to evacuate its contents again, and inject it with the compound tincture of iodine.

June 6.—I introduced a trocar and canula, as at the previous operation; this time both cysts emptied themselves by the single puncture, indicating that the artificial opening made through the septum had become permanent. After withdrawing the fluid, which presented the same appearance and amounted to nearly the same quantity as that removed at the first tapping, I injected into the cyst ℥ss. of a liquid consisting of tinct. iodinii co. ℥j., with aquæ destil. ℥iij. I placed the patient, at the time of the operation, in the sitting posture, but afterwards made her assume the recumbent position, so as to insure the distribution of the fluid over the whole of the interior of the cysts, and allowed the canula to remain, that I might remove the fluid if it occasioned very much pain. As, however, she complained of scarcely any inconvenience, in a quarter of an hour's time, after allowing a small portion of the fluid to escape, I withdrew the canula, and closed the opening in the skin with plaster.

On the following day the swelling had much increased in size again, and presented signs of active inflammatory action, being hot, tender, and painful. Her pulse also became quick and irritable, her skin hot, and tongue dry; the local symptoms resembling very much the effect of the injection of the tunica vaginalis for the cure of hydrocele.

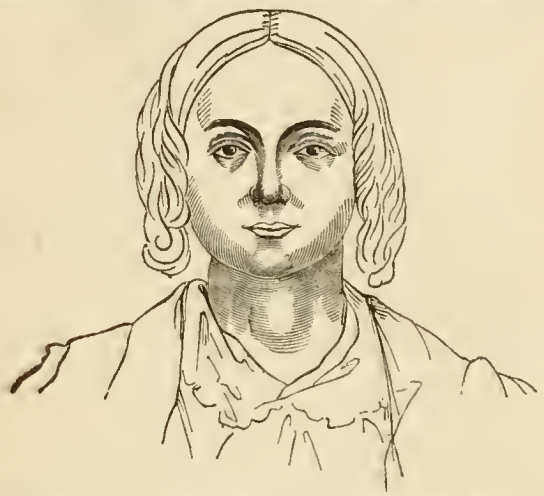
During the succeeding week, the swelling continued increasing in size, and her constitutional symptoms, arising from irritative fever, associated with suppuration, at one time assumed a somewhat serious aspect. She became subject to a constant offensive taste in her mouth, which gave rise to great irritability of stomach and frequent vomiting, and formed an important and distressing symptom.

June 13.—Punctured the cyst with a lancet, to the left of the original opening, and immediately a quantity of gas, and an exceedingly offensive sanguinoid liquid, mixed with a little purulent matter, escaped, and relieved her much of pain and tension. During the next twenty-four hours a considerable quantity of the same offensive discharge escaped, but it afterwards became more of a purulent character, and in a few days healthy suppuration was established,

her constitutional symptoms abated, and the discharge slowly but gradually diminished.

On the 19th, she was convalescing rapidly; on the 26th, was able to get into the open air; and about a fortnight afterwards left the hospital, the wound still open, and discharging in a very slight degree.

During the first week of September, she came to the hospital to see me. The wound had quite healed, and the discharge, she stated, ceased soon after her quitting the hospital. The swelling had completely subsided, and her neck presented a perfectly natural appearance. Another drawing was made at this time, of which the second engraving is a copy, showing the neck free from deformity;



and no doubt the patient may be considered as cured of a disease formidable from its size and its disposition to increase.

10, New Broad-street.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. GEORGE'S HOSPITAL.

By Dr. BARCLAY,
Medical Registrar.

ALBUMINURIA AND ITS TREATMENT.

There can be no doubt that disease of the kidney is much more common at advanced periods of life than at an early age, and that it is very frequently associated with the privations and the intemperate habits of many among the lower orders of society, who become the inmates of our Metropolitan hospitals. That it is not always so there is abundant evidence; and in such cases, it is yet quite undetermined what are its proximate or its exciting causes. By some it has been presumed, that the temporary derangement of function consequent on scarlatina often lays the foundation for ultimate degeneration. This relation it is most difficult, perhaps, at present, impossible to prove, because, in the great majority of cases admitted with disease of the kidney, the history, in regard to scarlatina, cannot be made out with any degree of certainty; and there are no data on which to calculate, whether ultimately a larger proportion of patients have confirmed albuminuria at a subsequent period who have had scarlatina, than of those who have not.

It is also to be considered, that the examination of persons who have died during the course of an attack of scarlet fever, or immediately after it, has not as yet proved that serious or irreparable mischief has resulted from it. The first great step has been made in the discovery of the relations of disease of the kidney to albuminous urine, and of both to general dropsy; but the more exact diagnosis of the varieties of the disease during life, and even the precise definitions of the varying states of the organ after death, are yet either altogether wanting or very uncertain. There are, however, manifestly two very different conditions of the organ associated with a fatal termination of the case, which, therefore, can scarcely be regarded as consecutive stages of the same disease; in one, the kidney is rather large, is perfectly smooth, and presents a mottled appearance on section, as if the cortical structure were intermixed with foreign deposit; in the other, the kidney is for the most part small, its surface is granular, and the cortical structure is manifestly dwindled and atrophied.

These two conditions are not as yet associated with any distinct diagnostic signs during life; nor is it, perhaps, of much consequence that they should be. The fatal case here recorded is accompanied by the same general symptoms, and is found associated with the same serous inflammations which are acknowledged as the concomitants of granular degeneration It derives its interest from the very early age at which it reaches its fatal termination; and for this reason every care was taken in ascertaining whether there had been anything like scarlatina in the neighbourhood, but ineffectually. Perhaps had this case come earlier under treatment, it might have been for a time, like the other, restrained from running on to a fatal termination.

Thomas H., aged 14, was admitted into St. George's Hospital, under the care of Dr. Wilson, on the 5th of November, 1851. He was reported to have suffered from dropsy during the two months previous to his admission; he never had scarlatina, and without any previous illness, the attack had commenced after exposure to wet and cold; the swelling had been first observed in the scrotum. He had not experienced any pain in the loins. The general surface was œdematous to a considerable extent, but fluctuation could not be made out distinctly in the abdomen. His face was pale and puffy, with blueish coloured lips, and eyes half closed from œdema; his breathing was oppressed; pulse small, frequent, and laboured; tongue furred, and inclined to be dry; bowels said to be open. He was ordered to be bled to six ounces, and to have a saline draught with colchicum and ipecacuanha.

The blood drawn was rather sizy, and his breathing was somewhat relieved by it. The urine was scanty, loaded with lithates, and highly albuminous; its specific gravity was 1035; and it was found, by microscopical examination, to contain urate of ammonia, epithelium, a few fibrinous casts, and blood-globules; his breathing was again very laboured, and the pulse rather firmer; and he was ordered a saline diuretic draught, with antimonial wine, in place of the former, and to have castor-oil.

On the morning of the 7th, he was attacked by vomiting, and brought up a lumbricus, and again a second the same evening. This was accompanied by diarrhœa; he had a restless and wandering night, and passed his motions under him in bed, and complained of some pain at the præcordium. The diarrhœa was checked by chalk mixture, but it did not seem to have had any effect in relieving the anasarca.

On the 10th the sickness recurred with more pain at the epigastric region; he was barely able to take wine or sustenance of any sort; the pulse was 124, exceedingly feeble; the tongue brown and dry; the breathing short, hurried, and accompanied by almost constant moaning; and an erysipelatous blush had appeared on the sacrum, and back of both thighs, which, however, did not spread after he was placed on the water-bed: altogether he seemed very much worse.

A little urine was obtained for examination on the 12th, which was of a specific gravity 1048, and excessively albuminous. It was found to contain some specimens of the sarcina ventriculi, which were then found in abundance in the matter vomited; a second specimen of urine, obtained with greater care, contained none.

The sickness continued to the end; the breathing became more oppressed; the pulse continued feeble, rapid, irregular, and latterly indistinct; and the tongue brown and dry. His consciousness became much obscured, he gradually sank, and at last died on the morning of the 13th November.

Post-mortem Examination Thirty-eight Hours after Death.—*Thorax.*—Both pleural cavities contained a quantity of yellowish fluid, but especially the left; and on both sides the surface of the lungs had numerous shreds of recent lymph upon them; the lower lobes of both lungs were non-crepitant, and sank in water, but were of tough consistency; a good deal of dirty brownish-red fluid exuded from the cut surfaces. There were some masses of coagulated fibrin found in some of the branches of the pulmonary artery distributed to the lower lobes. The bronchial tubes were vascular; the heart was, in all respects, healthy; the pericardium contained a very small quantity of fluid.

Abdomen.—The cavity of the peritonæum contained about two pints of thick milky fluid, with a quantity of thick yellow pus, which had subsided to the bottom of the cavity. The intestines were, externally, rather pale. The stomach was apparently healthy. The duodenum was very much congested, and the rest of the small intestine presented only one or two small reddened patches. The kidneys were smooth, with non-adherent capsules; the outer surface was pretty natural, but presented several stellated vascular por-

tions. On section, the cortical structure was of rather a pale yellow mottled aspect. They were rather over the average size. The rest of the organs in this cavity appeared to be healthy.

Ann F., aged 21, was admitted into St. George's Hospital, under the care of Dr. Bence Jones, on the 19th March, 1851; a lady's maid, who stated that, without any assignable cause, her legs had begun to swell some months previously, and that she had supposed herself cured three or four times, but the attack had always recurred. Her face was full, and rather puffy under the eyelids, but her complexion was good, and rather florid. Her appetite was good, the tongue clean, and the bowels open. She suffered a little from headache and drowsiness, and had some pain in the back. The urine was rather scanty, and very much loaded with pale lithates; it was rather of a deep colour, whence it had exactly the appearance of tea mixed with milk. She had never observed it to contain any blood. It contained a very large quantity of albumen, and had a specific gravity of 1035. In addition to the slight swelling of the face, there was also very great anasarca of the lower extremities, the thighs being especially swollen and very hard; it seemed to cease entirely at the groin, and there was no evidence whatever of fluid in the peritonæum.

The treatment consisted in giving a purgative of compound jalap powder every night, and employing the vapour bath every evening. The latter always produced copious perspiration, generally making her feel faint for some little time after. In a few days the swelling of the face had entirely disappeared, and the legs had become very much smaller, but were still hard. She passed but little urine; on one day, as she alleged, only about half a pint in twenty-four hours, and it continued generally very much loaded and highly albuminous, but sometimes remaining free from deposit.

In the early part of April she complained of daily increasing weakness. She suffered more from sensations of faintness after being in the bath, and had some attacks of sickness. The swelling disappeared, and again re-appeared in her face, while the legs varied from day to day.

On the 12th, her pulse was very feeble, and she complained of feeling very weak; that she had nearly fainted several times in the preceding day, and she thought the legs again rather more swollen. She was now ordered to have 5 grains of the citrate of iron, and 4 grains of sesquicarbonate of ammonia, in water, three times a day, and to continue the vapour baths.

She continued this treatment till the 2nd of May, when she left the hospital very much relieved, although not free from swelling. The urine did not increase much in quantity, but it was much more often free from lithates, was, when clear, of a tolerably natural appearance, and to the last retained a very high specific gravity, and was to re-agents excessively albuminous.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening,	Jan. 10.	—Medical Society of London. *Subject*:—Mr. Hancock, "On Some Cases of Excision of the Joints; with General Remarks on the Operation." Eight o'Clock.
Tuesday,	January 13.	—Royal Medical and Chirurgical Society. Half-past Eight o'Clock.
Thursday,	January 15.	—Harveian Society. Eight o'Clock.
Friday,	January 16.	—Western Medical and Surgical Society. Eight o'Clock.
Saturday,	January 17.	—Medical Society of London. Eight o'Clock.

Medical Times & Gazette.

SATURDAY, JANUARY 10.

NAVY VICTUALLING, AND OUR NAVY MEDICAL OFFICERS.

How would it have delighted Philip of Spain to have heard, in the era of the Spanish Armada, that there were, in the victualling stores of the British navy, thousands of packages of putrified meat, garnished with such items as "clots of hair," "pieces of intestine with the manure in them," and "lumps of gangrenous kidney;" and that a British Admiral, by withholding their just and acknowledged rights, had caused "great discontent to prevail among the assistant-surgeons of the squadron?" Such things, however, are not chronicled of the year A.D. 1587,—they are only true of the year One Thousand Eight Hundred and Fifty-two. The following is the substance of last Tuesday's and Wednesday's report of proceedings at the Clarence Yard, Portsmouth:

"Tuesday.

"The examination of the remaining stock of 'preserved meat' in store at Clarence-yard was resumed by the officers forming the board this morning; but they were again obliged to leave off prematurely, owing to the nausea engendered by their unwholesome task. They opened 497 canisters, varying in the amount of their contents from 10lb. to 10½lb. each, 466 of which were condemned and thrown overboard at Spithead, and 31 only considered fit to let pass for distribution among the poor. Each day brings to light some item of disgust in the matter of the commodity sealed up as 'preserved meat.' To-day we have inspected clots of hair, a piece of intestine with the manure in it, a huge lump of gangrenous kidney, and such like filthy items. But for the great efficacy of the disinfecting solution of Dr. Sir William Burnett, the Director-General of the Medical Department of the Navy, which is profusely used in the store where the examination is going on, it would be impossible for the officers to prosecute their investigation for long together, owing to the sickening stench arising from the stuff around them. There remain about 2,300 more cases to open, which will occupy the rest of the week."

"Wednesday.

"Out of 300 canisters, only *one* was [illegible] suffered to pass as consumable. The rest were thrown overboard at sea. The contents were chiefly loose putrid matter, now and then varied with a few stones, entrails with the excrement in them, kidneys green with decomposition, in many cases whole hearts festering with putridity, coagulated blood in great abundance, tallow, lumps of tendons, garbage, grease, and offal. The contract has long since been paid for. The goods are warranted to last sound and wholesome for five years after delivery. The contractor is not to be found. That 'preserved meat' from this stock had been issued to sea-going ships, we know, as Commodore Lambert, of the Fox, on the East India station, returned a lot, with the report that after partaking of some of it those who had done so had been seized with sickness, &c.; and we believe Commodore Martin, of the Prince Regent, 90, on the Lisbon station, also had some of it, and returned it, and so doubtless have many other ships."

Now, it strikes us that there must be most gross mismanagement on the part of the naval authorities, and especially of those having to do with the victualling contracts. Either contracts must be taken at such "a low figure" that the contractor is obliged to "make weight" with offal, or there is not sufficient vigilance exercised as to the ability and integrity of the parties offering tenders. It is all very well for the Storekeepers of the Navy to receive so many thousand canisters, and to suppose them honestly filled and hermetically sealed; but if they will, for economical appearances, "accept the lowest tender," or, from private feelings, serve a friend, they can have no guarantee against gangrenous kidneys, clots of hair, and undischarged fæces. We should like to know,—and it is not very preposterous to demand that the country should know,—the whole process of this "meat-preserving," from the time that the animal (we shall not quarrel just now as to *what* animal) was slaughtered, to the period when his disparted remains were shut up in the contractor's tin canisters. We cannot forget, in connexion with the above details, a scene opened up to us on the site which the City authorities proposed for their new Cattle Market. We there visited two "establishments" for curing "victuals," or "junk," or "hams"—the *alias* matters little—from which the navy and large "provision merchants" were supplied. There we saw the bluish-purple sheep in close proximity with the vermilion pig and other animals which, at a cursory glance we could not recognise. The "villanous com-

pound of vile smells" from the yard and soup-boiler's cauldron was positively overpowering. Scattered about in various localities were heaps of hams, covered with some kind of artificial mildew to denote age, while a large space was filled with tubs of saltpetre, pickle, and other preservatives for restoring to pristine freshness the decayed animal matters which there polluted the atmosphere. Perhaps our naval men are not addicted to tripe; but as a specimen of what landsmen, on the scene of action, are induced to devour, and, therefore, of what those on the wide seas, or on Arctic Expeditions, are likely to be obliged to subsist upon, we relate our experience of another locality—our travels in this almost unknown land. In the lower part of Bowling-street, and occupying a great portion of that sink of all uncleanliness—the Fleet-ditch being exposed—five or six entrail-dealers were located; while one habitation, if a dilapidated mass of building materials can be so designated, was used for dressing and preparing tripe for the supply of a large shop in Sharpe's-alley. This suspicious article of human food—this doubtful tripe—we saw lying scattered about in heaps on the floor of a small apartment, once the sitting-room of a family; and as we passed to the back-yard, descending by a steep declivity to the ditch, it was quite impossible to avoid treading in the ordure and filth with which the ground was both saturated and covered, and mingled with the tripe so soon to be sold for human sustenance. There was an utter absence of all appliances for washing and cleansing the entrails of which tripe is manufactured; and the only reasonable supposition was, that the Fleet-ditch, which at that spot, dark and polluted, rolls down a torrent of liquid filth, answered the double purpose of washing the tripe and receiving the ordure.

Now, it would be very desirable to have all the data before us as to the "whence" and the "how" of the contents of the tin canisters—the "preserved meats" of the Navy. We would ask the contractor, does he kill, dress, cure, and pack all for which he tenders, and that on his own premises; or are there no sub-contractors? Will he say, that *he* put in a gangrenous kidney and the ordure of animals for the food of the Navy? If he answer in the affirmative, and goes unpunished, then are the Sloane's martyrs to fastidiousness;—if in the negative, he deserves to be made responsible for all the doings of the Sharpes-alley slaughter-houses, tripe-dressers, and provision-curers.

We take up this question as one regarding the health of a class of men to whom this country owes so much of her greatness. What, if perchance our Arctic expeditions had been fitted out with provisions such as these? Northern latitudes may be favourable to the preservation of wholesome meats; but we have yet to learn that the North Pole is "Nature's sweet restorer" of putrescence. And shall it be said of our seamen, as they buffet the wild waves, that they are fed on—Pshaw! we will not name it. And should it happen that some of these stores do actually get on board and are used, and disease breaks out (a), then the first man called upon to cure what might have been prevented, is the ill-used and insulted assistant-surgeon—deprived of his cabin, as we are informed in a communication we have received, to accommodate an admiral's maid-servant—called upon, under galled feelings, to tend a poisoned crew. Upon this subject we shall have a word to say in our next. In the meantime, we commend the above to those whom it concerns.

(a) In the same report from Portsmouth as that quoted above, it is said, "Measles have broken out on board the Bellerophon, 78, Captain Lord Paulet, and liberty to go on shore is prohibited to her crew. At the date of our letter she had sent two subordinate officers and three boys, labouring under the disease, to Malta Hospital."

TRAINING INSTITUTIONS FOR NURSES.

Who can boast of never having lain upon a bed of sickness? Let the disease be but slight and transitory; let the patient be surrounded with every comfort which wealth can bring, and every attention affection can dictate, the hours still linger heavily, the mind frets at the imprisonment of the body, and ere long the sufferer envies the humblest being, who, though barely clothed, yet moves where he listeth, and breathes in health and comparative enjoyment the fresh air of heaven.

And what if he be the subject of a disease from which, after years of suffering, there is no release save death? Can he expect, or would he even wish, that those whom he loves should devote all their time to the ministration of his wants, and the gratification of his distempered fancies? The human frame cannot long sustain so great an effort; and hence it is that the paid nurse is introduced, and her care secured.

A paid nurse of the old school! We in the Profession well know what that means,—a hard-minded, ignorant, lazy, drunken woman, who upsets the whole establishment with her whims; sleeps when she should be awake; is cross when she should be patient; and is constant only in a persevering attempt to make the job as lucrative as possible.

But if to the wealthy a good nurse is so great a comfort in the hours of trial, how much more so is she to him who, separated from his family, alone in this great Metropolis, with straitened means, and dependent in great part upon his own exertions for support, finds that the hand of sickness has fallen upon him. In the day he may be unable to obtain attention to his most common wants; in the night in vain he may seek a glass of water to moisten his parched lips. And when does he not miss those numerous kind offices which, though small and even nameless, have so great an effect in tranquilising the mind, and rendering pain endurable?

As to the really poor man, the contemplation of his condition in sickness,—penniless, forsaken, and with starving children,—may well call forth the exertions of the clergy and the liberality of philanthropists.

No class, however, is more directly concerned in promoting any scheme for the supply of good nurses than the Medical Profession. The physician, for example, in cases of fever, will readily confess how much depends upon the incessant watching of a tried and experienced attendant. The question of life or death is often determined by the judicious administration, during a brief period, of food and of stimulants; by attention to cleanliness; by the sponging of the heated body; and by the proper admission of free air into the infected room.

The surgeon knows well the value of a good nurse. When his operation has been performed, and he absent, he must rely upon her judgment, and trust to her report; he must be assured of her watchfulness and knowledge of the first signs of impending danger. She must be familiar with the treatment of wounds, and understand that which is so great a source of terror to unprofessional persons—hæmorrhage,—and be able to employ means for its arrest.

Society may perhaps feel both astonished and alarmed when we assert, that within a few years only has any attempt, however slight, been made to establish institutions for the education of this important class; and that even now the supply is so inadequate, that it is quite possible, and, indeed, probable, a good nurse could not be procured upon a sudden emergency either for love or for money.

Both the public and the Profession are deeply and per-

sonally interested in this subject; and hence we now notice two Institutions, both small and poor at present, but both likely, we trust, ere long, to be large, and rich, and flourishing. There are plenty of wealthy and benevolent persons who wish to know in what quarter liberal gifts of money will prove a blessing and not a curse; and to them we say, read the unpretending Reports of the Institutions for Nurses, and we feel assured that there will be but one opinion as to their strong claims for public support.

In 1840, the late Mrs. Fry established the Institution of "Nursing Sisters," now domiciled at No. 4, Devonshire-square, Bishopsgate-street. Women, selected with great care, and of irreproachable characters, are admitted first as probationers, trained for a certain time in one of the public hospitals; and then, their education being complete, received as "Sisters." They are allowed an annual stipend of 20*l.*, which is raised to 23*l.* after three years' service. They are supplied with an appropriate dress; and maintained in the "Home" during the intervals of their engagements. The rich are expected to pay 1*l.* 1s. a week for attendance; but the sick poor are gratuitously supplied, when the Sisters are disengaged. The sum of money paid for attendance is forwarded either to the Bankers, or to the "Home." The names of the Patronesses, and of the ladies forming the Committee, guarantee any amount of public confidence. We need only mention the names of the Treasurer, Mrs. S. Gurney, jun., and of Miss Fry, the worthy daughter of a worthy and much regretted mother; a lady who has been unwearied in her efforts to extend the sphere and usefulness of the Institution.

In 1848, an Institution, equally moderate in its demands from the wealthy for services performed, and equally unlimited in its acts of benevolence towards the poor, was founded, under the auspices of the Bishop of London, in Fitzroy-square. This Institution, called St. John's House, resembles, in many respects, those useful religious foundations which have been so productive of good in Belgium and in other Continental States. It is under the control of a Master, who must be a member of the Church of England; of a Lady Superintendent, assisted by other ladies, her associates, or sisters; and of two physicians—all of whom must be approved by the President.

The nursing department consists of probationers and nurses. The probationers are of two classes. The first, young women, twenty-five years' old, or upwards, likely to become qualified as nurses by some few months' probation. The second class are young women of the age of eighteen, or upwards, to be trained at the Institution, and in the public hospitals. The nurses are admitted after having been probationers. The same inadequate sum, as in the former Institution, namely, 1*l.* 1s. a week, is demanded for attendance from the rich. The poor, of all religious denominations, receive as much gratuitous attendance in the hours of illness as the funds of the Institution will allow. As regards these nurses, both of Devonshire-square and of Fitzroy-square, the highest character for efficiency, skill, and kind attention, has been forwarded to us from the first professional quarters; and increased funds are now only wanting for the completion of these most necessary as well as charitable works; for creating a calling—we had almost said a profession—by which an intelligent and worthy female may, at an early age, gain an honourable independence; by which a most useful and important class will be formed for services of great trust among the wealthy; by which messengers of charity and of hope will be sent among the poor, to seek out fit objects for relief, to assist, when possible, in the restoration of the sufferer to health, or to smooth his pillow when the hour of death is nigh. It is not often that we make a demand upon the public, but we do emphatically pronounce both these Institutions deserving of the most extended and liberal support. Visiters interested in the Institution in Fitzroy-square, as well as applicants for nurses, are at all times received with the utmost courtesy by the Master, the Rev. P. Maitland, or the Lady Superintendent, Mrs. Morrice, the latter of whom resides in the Institution. The well-known families of the Frys and Gurneys—notorious for their charities and benevolence—will reply to all questions concerning the "Home" in Devonshire-square.

AN O'ER TRUE TALE.

The characteristic feature of our Profession is benevolence. The lawyer may have to prove the worse the better side, and so do a grievous injustice; the soldier must inflict the most fearful individual wrongs, even when fighting for a righteous cause; the priest, while he soothes the penitent, sometimes anathematises the unbeliever. To be a man, and to suffer, is to claim and receive the help of the physician. He knows no difference between men of warring nations, or of opposite creeds; and the oppressor and the oppressed, the virtuous and the vicious, if the victims of disease, are alike to him; his hand is against no man; he offers aid to all. Glorious, indeed, is his calling; and truly may he be said to embody the spirit of universal benevolence who practises it in purity of heart, and seeks only to carry out its holy mandates.

Alas! that we should have to tell a tale,—would that it were a tale only,—which shows that there are among us men who forget alike what is due to themselves, and to their noble calling,—physicians, or, let us trust we may say, a physician, who not only does this, but who does an act from which we had hoped the meanest English tradesman would have shrunk.

We publish the facts of the case, although we would rather that they were buried in oblivion,—and why, then, do we thus give them to the world? Only that we may tell those who already know something of the matter, that this man, notwithstanding he is among us, is not of us; that if we cannot eject him from our body, we repudiate the spirit by which he is animated.

Here are the particulars:—

A clergyman resided in the same house with an M.D., a Licentiate of the Royal College of Physicians. The latter occupied the ground floor; the former an apartment above. The priest was a man of some literary eminence, but want and sickness,—a sickness which terminated in death, had visited him. His wife, his little children, and himself, during the last days of his life, owed their bread partly, at least, to funds supplied by a public charity.

The poor and dying clergyman sought the advice of the physician—of the man who was his nearest neighbour—of him who dwelt in the same house.

It was given—no, it was sold. And when the priest had passed to his last home, to that place

> "Where the wicked cease from troubling,
> And the weary are at rest,"

the physician sent to his widow,—to this beggared, this penniless mother of three little children,—a bill for 17*l.* 15s.! Nay, more, to this poor lady, whose last farthing had been expended on her dying husband,—to this lady, for whom and her children an appeal to the public is now being made in

the daily papers, he addressed a note, in which he tells her, that the payment may be made at her convenience, "provided he is assured of its ultimate discharge within a reasonable period."

This is an unvarnished tale; it speaks for itself; it needs no comment. It would be superfluous to quote Percival's law,—"Clergymen who experience the '*res angusta domi*' should be visited gratuitously by the Faculty"—it would not touch this man's hard heart.

If another medical man could be found to act as Dr. —— did, we should weep with shame, to think that we too were physicians. Then, indeed, should we say, "*O tempora! O mores!*" Oh! physic and physicians, to what are your glories shrunken?

We print the bill in full, informing our readers, that on the 4th of November the poor gentleman was evidently dying, and that on the 14th,—the day four visits are charged,—he expired.

Executor of

Dr. to

1851.		£.	s.	d.
April 24	Advice	0	5	0
„ 25	Do. ..	0	5	0
„ 26	Do. ..	0	5	0
„ 28	Do. ..	0	5	0
May 1	Do. ..	0	5	0
„ 5	Do. ..	0	5	0
„ 9	Do. ..	0	5	0
„ 14	Do. ..	0	5	0
„ 19	Do. ..	0	5	0
„ 21	Do. ..	0	5	0
„ 22	Do. ..	0	5	0
„ 23	Do. ..	0	5	0
„ 26	Do. ..	0	5	0
„ 30	Do. ..	0	5	0
Aug. 7	Do. ..	0	5	0
„ 9	Do. ..	0	5	0
„ 12	Do. ..	0	5	0
„ 26	Letter of do.	0	5	0
Sept. 21	Do. ..	0	5	0
„ 25	Do. ..	0	5	0
„ 29	Do. ..	0	5	0
		£5	5	0

1851.		£	s.	d.
	Forward	5	5	0
Oct. 2	Advice	0	5	0
„ 6	Do. ..	0	5	0
„ 10	Do. ..	0	5	0
„ 13	Do. ..	0	5	0
„ 15	Do. ..	0	5	0
„ 20	Do. ..	0	5	0
„ 25	Do. ..	0	5	0
„ 27	Attendance	0	5	0
„ 28	Do. ..	0	5	0
„ 29	Do. ..	0	5	0
„ 30	Three visits	0	15	0
„ „	One night do.	0	5	0
Nov. 1	Two visits	0	10	0
„ 2	Do. do. ..	0	10	0
„ 3	Do. do. ..	0	10	0
„ 4	Four do. ..	1	0	0
„ 5	Two do. ..	0	10	0
„ 6	Do. do. ..	0	10	0
„ 7	Do. do. ..	0	10	0
„ 8	Do. do. ..	0	10	0
„ 9	Do. do. ..	0	10	0
„ 10	Three do. ..	0	15	0
„ 11	Do. do. ..	0	15	0
„ 12	Do. do. ..	0	15	0
„ 13	Do. do. ..	0	15	0
„ 14	Four do. ..	1	0	0
		£17	15	0

ST. GEORGE'S HOSPITAL.

MEDICAL APPOINTMENT IN THE EAST INDIA COMPANY'S SERVICE.

We have much pleasure in making the following correspondence public, and in expressing our hearty concurrence in the mode in which the patronage has been disposed of. It is impossible to say how much good may not be accomplished by placing such appointments in the hands of the different Medical Schools of the metropolis, by which young men, without any personal interest, may acquire an honourable and lucrative position for themselves; and we trust, that the Governors of St. George's Hospital (who have been fortunate enough to receive two such appointments this year) will not forget Sir Benjamin Brodie's advice in awarding the prize. We are satisfied, that of all the positions in which a medical man can be placed, there is none where moral character and good discipline are more required, and will *tell* more, than in India. The benefit would be great to the Medical Service in India, if the Company would yearly place such an appointment at the disposal of each Hospital School.

To the Chairman of the Weekly Board of St. George's Hospital:—

"Sir,—You will perceive, from the enclosed letter, that my friend, General Caulfield, has been so kind as to offer me an appointment in the medical department of the East India Company's service for one of the students of St. George's Hospital.

"It is my wish to place the appointment at the disposal of the Weekly Board, feeling assured that they will adopt the necessary measures for conferring it on some one who will do credit to his Profession, and to the school in which he has been educated; and I take the liberty of suggesting, that while it is important that the individual thus selected should be distinguished on account of his high professional attainments, it is not less important that he should be also distinguished for the propriety and regularity of his conduct, and his gentlemanlike behaviour.

"I have the honour to be, Sir, your obedient

"B. C. Brodie,

"Savile-row, December 23, 1851."

The Weekly Board unanimously passed the following resolution:—

"That the Secretary write to Sir Benjamin Brodie, requesting him to convey to General Caulfield the cordial and grateful thanks of the Board, for his very munificent donation; and also to express to Sir Benjamin Brodie the warm thanks of the Governors, for this additional proof of the interest he has ever taken in the welfare of St. George's Hospital School; adding, that the Board entirely concur in his opinion, with regard to the principles by which the Board should be guided in the awarding of the appointment."

REVIEWS.

Physiological Chemistry. By Professor C. G. Lehmann. Vol. I. Translated from the Second Edition by George E. Day, M.D., F.R.S., Fellow of the Royal College of Physicians, and Professor of Medicine in the University of St. Andrews. 8vo. Pp. xii. and 445. London: Printed for the Cavendish Society. 1851.

The Cavendish Society has established for itself a strong claim to the support of the Medical Profession, by undertaking the publication of Lehmann's "Physiological Chemistry," which, when completed, will unquestionably form the most perfect treatise on chemistry, in its relations to physiology and pathology, that has yet been attempted. The first volume—the only one with which at present we have to do—treats of "the Organic Substrata of the Animal Organism;" the second, which we believe will be issued by the Cavendish Society in a few months, will treat of "the Juices of the Animal Body;" while the third, which has not yet appeared in German, will treat of the Chemical Composition of the Animal Tissues and Organs, and of the Zoo-chemical Processes, such as Digestion, Respiration, etc., both in Health and Disease.

The present volume commences with a "Methodological Introduction," in which the author considers the various reasons why chemists, in their superabundant zeal, have fallen into grave errors in their endeavours to elucidate physiology and medicine, and proceeds to indicate the actual objects of physiological chemistry. We shall endeavour to give our readers an abstract of his views on the latter point, and to explain the different directions in which our inquiries must be conducted.

The actual object of physiological chemistry is to examine the course of the chemical phenomena of the animal organism in their causal connexion, and to deduce them from known physical and chemical laws. Three great methods of conducting this class of investigations present themselves.

The first of these is the *statistical*. Liebig, Boussingault, and Valentin have applied this method with considerable success to the comparison of the ingesta and excreta of the animal organism; and it was thus that the contest was carried on between Liebig on the one side, and Dumas and Boussingault on the other, regarding the formation of fat within the living body,—a contest which, as our readers are doubtless aware, was finally settled in favour of the former.

A second method, by which we may examine the course of phenomena, and the cause of their succession, may be named the *comparative-analytical* or *chemico-experimental*. Here we attempt to imitate artificially the chemical phenomena of the living body, and to compare the chemical metamorphoses of certain substances external to the vital sphere with those within the influence of the vital processes. As illustrations of this mode of inquiry, we may

refer to Liebig and Wöhler's investigations, of the products of oxidation of uric acid, and to the results obtained by Schliesser and Guckelberger from the artificial oxidation of albuminous bodies, and of gelatin. Dessaign's important discovery of the decomposition of hippuric acid into glycine (glycocoll) and benzoic acid, may also be placed in this category.

A third method, which, although frequently employed, has hitherto yielded few reliable results, is the *physiologico-experimental*, a term employed to designate "that class of inquiries in which observations are made, in the living organism, on the result of certain conditions on the progress of a physiologico-chemical process, and on the different stages of that process." Under this head we may reckon the investigations that have been made in reference to the contents of the stomach during the process of digestion, to the chemical change of individual substances in the development of the egg during incubation, and to the dependence of the products of respiration on different external conditions. To these we may add the experiments that have been instituted on the changes of individual substances during their passage through the animal organism, and on the effect of different kinds of food, and the metamorphoses they undergo during the process of nutrition.

We proceed, without further comment, to the consideration of the true subject-matter of this volume,—the Organic Substrata of the Animal Organism.

The constituents of the animal body are arranged by our author under the following heads:—

I. Non-nitrogenous Acids.
II. Nitrogenous Basic Bodies.
III. Conjugated Nitrogenous Acid.
IV. Haloid Base, and Haloid Salts.
V. Lipoid.
VI. Non-nitrogenous Neutral Bodies.
VII. Colouring Matters.
VIII. Extractive Matters.
IX Nitrogenous Histogenetic Substances.
X. Mineral Constituents of the Animal Body.

The following are the non-nitrogenous acids described by Lehmann:—Oxalic, formic, acetic, metacetonic, butyric, valerianic, caproic, œnanthylic, caprylic, pelargonic, capric, cetylic, succinic, sebacic, benzoic, lactic, margaric, stearic, oleic, doeglic, lithofellic, and cholic acids.

Oxalic Acid, according to our author, is not always to be regarded as a morbid product when it occurs in the urine. Its presence in healthy urine may be demonstrated in the following manner. If it be winter, we must expose the excretion out of doors till it freezes; in this process, as in the freezing of wine and vinegar, a great part of the water crystallises in a comparatively pure state, and after its removal, we obtain a concentrated saline solution, in which crystals of oxalate of lime may be discovered by the microscope. This salt is rarely found in other places besides the urine. Schmidt has, however, noticed it in the mucus of the gall-bladder, and asserts that it is hardly ever absent from the mucous membrane of the impregnated uterus. Lehmann once discovered it in expectorated matter, but whether it was produced from the pulmonary mucus, or from the fragments of food in the mouth, he could not decide. He adds, that both in the biliary ducts, and in the excrements of caterpillars, he has frequently met with crystals of this salt.

We extract the following remarks on the origin of oxalic acid in the organism.—

"As the use of vegetable food, of which many varieties contain oxalates, increases the quantity of oxalate of lime in the urine, the inference would seem a legitimate one, that the oxalates are transmitted from the food to the urine. The source of this salt must, however, not be sought for only in the preformed oxalates, but in the amount of alkalies in combination with vegetable acids present in the food; for, as we have already mentioned, they induce an augmentation of the oxalate of lime. In all the well-marked cases to which I have alluded, the increase of the oxalate of lime seemed to be combined with disturbance of the respiratory process. Thus it may easily be understood why, after the use of drinks rich in carbonic acid, of alkaline bicarbonates, or vegetable salts, oxalic acid is increased in the urine; the superfluous carbonic acid which has entered the blood, or been generated there from the salts of organic acids, must obstruct the absorption of oxygen and the perfect oxidation of certain substances in the blood; hence also the quantity of oxalate of lime has been found to be increased by the partially impeded exchange of oxygen and carbonic acid in the lungs, consequent on emphysema, pulmonary compression during pregnancy, &c. We might, in such cases, assume, according to a formerly prevalent belief, that the kidneys in some degree acted vicariously for the lungs, since under the form of oxalic acid they remove from the organism the carbon which the latter organs would have excreted as carbonic acid.

"Although certain chemists hold a contrary opinion, it is an undoubted fact, that the nervous system has an influence on the oxidation of the blood. The occurrence of oxalate of lime in cases of epileptic convulsions, in convalescent persons, &c., might be referred to the disturbance induced in such cases in the nutrition or in the function of the nervous system, and to its diminished influence on the process of respiration, without there being any necessity for the assumption of a special diathesis.

"It seems, moreover, unreasonable to set up such a diathesis, since the establishment of a special disease from a single symptom—that symptom being only the occurrence of oxalate of lime—is entirely opposed to the spirit of rational medicine.

"From Wöhler and Liebig's discovery, that uric acid is decomposed by peroxide of lead into urea, allantoin, and oxalic acid, it has been pretty generally assumed that the oxalic acid of the urine is due to an oxidation of the uric acid; the oxalic acid, in this case, not being converted into carbonic acid, as usually occurs in the healthy organism. That the formation of oxalic acid may be in part thus explained, is unquestionable, but there are many other substances in the animal organism besides uric acid, which, by oxidation, yield oxalic acid. No definite numerical ratio between the uric acid, urea, and oxalate of lime in the urine, has been yet established.

"C. Schmidt(a) has propounded a very ingenious view regarding the origin of oxalate of lime in the urine. He believes that we must seek for the source of its secretion in the mucous membrane of the urinary passages, and that the oxalate of lime is first produced by the decomposing action of the acid urine on a soluble compound, oxalate of albumen lime, secreted by the mucous membranes; for oxalate of lime as an insoluble body could not penetrate with the urine through a series of renal cells; oxalate of lime is also formed from the mucus of the gall-bladder by this mode of decomposition. When oxalate of lime occurs in the urine, we always find an augmentation of the mucus. These reasons do not, however, appear to be so decisive as to induce us to exchange the view we have already given for that of Schmidt; and, indeed, in another place we find Schmidt(b) himself maintaining that the urea is in part combined with oxalic acid." Vol. I., pp. 47—48.

Formic acid has been recently detected by Scherer in the juice of flesh, where it is associated with lactic, acetic, and other acids. From a note added by the Editor, it appears probable that the active poisonous principles in certain caterpillars and insects is formic acid.

Lactic acid is the next body of this class to which we shall advert. The whole of the chapter on this acid is well deserving of an attentive perusal by every one desirous of keeping himself on a level with our present knowledge of physiological chemistry. The following peculiar relation has been recently observed by Engelhardt and Maddrell in the crystallisable lactates. The lactic acid obtained from the animal fluids, and that produced from sugar by fermentation, form with the same base salts which present certain differences in the amount of their water of crystallization, in their degree of solubility, and in their decomposition by heat. This is, however, a subject requiring further investigation, for Liebig thinks that he has obtained from the acid of *sauer kraut* a zinc salt corresponding with that yielded by the muscular juice; and Lehmann, in analysing the lactic acid of the gastric juice in combination with magnesia or zinc, always found it correspond with that obtained from sugar.

We proceed to give a brief abstract of the physiological relations of this acid. Lehmann has shown, that in the gastric juice there are both free lactic acid and lactates, in addition to free hydrochloric acid. He has never been able to discover the presence of lactic acid or lactates in the normal saliva either of man or the horse; but in a case of diabetes, in which there was spontaneous ptyalism, he convinced himself, beyond all doubt, of the presence of the free acid. He likewise detected it in the contents both of the small and large intestines of the horse. The recognition of lactates in healthy blood is as difficult as that of urea, and it is probable that we shall never obtain a positive demonstration of the existence of alkaline lactates in the blood by direct experiment, although the simplest induction proves that they must be present there, even if they only remain in it for a short time. Lactic acid may, however, like urea, collect in such large quantities in the blood, as to be capable of detection by chemical analysis. Cases of this sort have been described both by Scherer and Lehmann. It has been detected in exudations after puerperal fever, and in emphysema. Although lactic acid was first discovered by Scheele in milk, it does

(a) Ann. d. Ch. u. Pharm. Bd. 60, S. 55, ff.
(b) Entwurf u. s. w. S. 47.

not occur in the healthy fresh milk of man or animals. After considerable exposure to the atmosphere healthy milk acquires an acid re-action, which is dependent on the formation of lactic acid from the sugar of milk by fermentation. It exists in a free state in the muscular fluid—a fact recognised forty-two years ago by Berzelius, and lately re-discovered by Liebig; and its salts are asserted, by the first-named chemist, to occur in the sweat and in the bile. Schmidt has separated it in the form of lactate of zinc from the strongly acid fluid yielded by the long bones in a case of osteo malacia. The question, whether or not lactic acid and its salts exist in the urine is one regarding which there has been so warm a contest between Liebig, on the one hand, and Berzelius, Lehmann, etc., on the other, that we shall give our author's present opinions on this point. After very frankly confessing that his earlier analyses were open to deceptions in reference to this acid, he adds, that to maintain that the urine of healthy men and animals never contains lactic acid, or lactates, under any physiological relations, is equally erroneous with his former view, that lactic acid constantly occurs in animal urine, and that the acid re-action of this fluid is solely dependent on its presence.

"A more extended investigation has led me to the following results:—In all cases, where the supply of lactates to the blood is very great,—whether this depends on an excess of acid being formed in the muscles, or on the use of a diet tending to produce it, or on an imperfect process of oxidation in the blood,—lactic acid may be detected in the urine with all the certainty which, in the present state of chemistry, can be expected in such researches. Hence we can understand why it is that, in the urine of the same individual, lactic acid may on one day be present, and on another absent; why, in many persons, no lactic acid can be detected in the urine, and in others, again, (and especially in those who, in consequence of repeated catarrhs, suffer from partial relaxation of the pulmonary tissue, and yet often think themselves perfectly well,) it is constantly present in the urine; why stall-fed animals, living on amylaceous fodder, excrete lactic acid by the kidneys, (and in part, also, by the mammary glands,) while under other conditions this acid cannot be discovered in their urine; and why, finally, in most febrile diseases, lactic acid may be recognised in the urine." Vol. I. pp. 99—100.

From the observations on *cholic acid*, $C_{48}H_{39}O_9 \cdot HO$, (the *cholalic acid* of Streeker,) which occurs in bile conjugated with nitrogenous bodies, and in combination with potash and soda, we extract the following observations on Pettenkofer's *bile-test*:—

"Cholic acid, even when not perfectly pure, may be recognised by its re-action with sugar and sulphuric acid. This re-action, which was first discovered by Pettenkofer, occurs with no other substance than cholic acid; it is, however, perfectly immaterial whether the cholic acid be already metamorphosed into choloidic acid, or whether it be combined with its adjuncts, as a conjugated acid. Hence we can apply this admirable test to discover generally either the presence of bile or of one of its derivations. The following is the best method of proceeding:—The alcoholic extract of the fluid to be tested for biliary matter must be dissolved in a little water, with which we must then mix a drop of a solution of sugar, (to the proportion of 1 part of sugar to 4 of water,) and pure English sulphuric acid, free from sulphurous acid, must be added by drops to the mixture; the fluid now becomes turbid from the separation of the cholic acid, but, on the gradual addition of sulphuric acid, the turbidity disappears, and the fluid again becomes perfectly clear. For the first few moments its colour is yellowish; it very soon, however, becomes of a pale cherry colour, then of a deep carmine, of a purple, and, finally, of an intense violet tint. As, indeed, in all experiments, some practice and attention to certain rules are requisite, without which we may easily fail to apply this test successfully to the detection of bile. For instance, we must avoid the addition of too much sugar, as this is a substance which is easily rendered brown or black by sulphuric acid; but we must be especially careful, as Pettenkofer himself showed, while adding the concentrated sulphuric acid, not to allow the temperature much to exceed 50° F.; but the re-action equally fails when we carry our caution too far, and attempt to avoid any elevation of temperature when the sulphuric acid is added; indeed, my own experience leads me to believe, that an elevation of the temperature nearly to 50° is requisite for the success of the experiment. Should the fluid at first assume only a cherry-red or a deep carmine tint, it must be allowed to stand for some time, after which the intense violet colour becomes developed. It is, moreover, immaterial which kind of sugar is used for this test: acetic acid may also be employed in place of sugar.

"Van den Broek maintains, that the re-action also takes place with mere biliary matter, independently of the sugar; but I have never found this to be the case; without sugar, the fluid has at most attained a red or reddish-brown tint, but never the characteristic deep violet colour. But, although Van den Broek is wrong on this point, there are other reasons why his view is correct, that this re-action is inapplicable as a test for sugar: in the first place, because we have the same re-action when other bodies—as, for instance, acetic acid—are substituted for sugar; and, secondly, because we have many better and more certain means of discovering this substance." Vol. I., pp. 123—4.

Neuralgia; its Various Forms, Pathology, and Treatment. Being the Jacksonian Prize Essay of the Royal College of Surgeons for 1850, with some Additions. By C. Toogood Downing, M.D., M.R.C.S. 8vo. Pp. 375. London. 1851.

The author of this work, published some time since a little book "On Painful Affections of the Nerves," the consequence of which, he informs us, has been a rather large share of personal experience among all classes of society. The information gained by this experience, he has embodied in the present work; and, in addition, has prepared a digest of the various facts and observations scattered through previous and contemporary authors.

Dr. Downing divides neuralgia into three classes. 1st. Spasmodic; 2nd Rheumatic; and 3rd. Hysterical. Each of these varieties is described. The advantage of attending to these distinctions cannot, he says, be too much insisted on; yet they have been, by the greater number of writers, confounded together under one common title, and treated accordingly.

The cases of rheumatic and hysterical neuralgia are those of rheumatism and hysteria generally. The causes of spasmodic or true tic douloureux, are considered at length, under the following heads:—Predisposing, General, Exciting, Local Exciting, and Proximate Cause.

With reference to the proximate cause, or the essential nature of neuralgia, Dr. Downing considers that the pain, etc., experienced during the attack are due to "a *contractile action* or *motion* of the *nerves themselves*

The following extract will give the reader a good idea of the author's style and power of reasoning:—

"It cannot be supposed that the neurile matter itself is possessed of contractility. The power must reside, if at all, in the neurilemma, the structureless membrane enclosing it, identical with the sarcolemma of unstriped muscular fibre. This tissue, enveloping each fibrilla, must constitute a considerable part of the bulk of each nerve. Its properties have been little investigated. It is known to possess elasticity. Contractility is the most universal principle of the living system. It resides in most of the tissues, and is capable of being roused into activity by appropriate stimuli. It may exist in the neurilemma, although ordinarily quiescent. No great liberty is taken, therefore, in supposing that this tissue is susceptible of extraordinary excitement under disease, and, by compressing and extending the neurile matter, giving rise to the severest local pain."

The idea of this spasmodic theory, Dr. Downing says, arose in his own mind spontaneously.

In his chapter on Treatment, Dr. Downing gives a pretty full account of the host of remedies that have been tried for the relief or cure of neuralgia, and attempts to give to each its true place. Longer experience has, he says, confirmed the high opinion he expressed in 1849 of the value of the local application of warmth and sedative vapour. In the *Medical Times* for that year, we gave an account of Dr. Downing's little book on the subject; and, in our papers on the Great Exhibition, figured the instrument by the aid of which he applies the soothing current of heated air.

The remainder of the work is occupied by a description of neuralgia of particular parts. Dr. Downing's book gives a good summary of what is known on the subject of which it treats, and, as such, will be found useful to a large class of readers.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM JOURNALS.

DR. GEORGE LIEBIG ON THE RESPIRATION OF MUSCLES.

Professor Magnus communicated to the Berlin Academy the results of a series of experiments performed by George Liebig. These consisted in a comparison of the length of time the electrical contractility of the muscles of the frog can be maintained, when successively exposed to atmospheric air, oxygen, hydrogen, nitrogen, and carbonic acid; as also of the quantity of oxygen absorbed and carbonic acid given off. The details are all stated and tabulated, but we have room only for the results. A muscle

retains its contractile power longer in an atmosphere of oxygen or one containing this, than in one in which none exists ; and during the continuance of the contractile power the muscle absorbs oxygen and gives off carbonic acid. If we term the reception of oxygen by the animal organism, and the contemporaneous giving out of carbonic acid by it—respiration, so must we, according to these experiments, admit that a muscle separated from the body, if exposed to a suitable atmosphere, continues awhile to respire. As the duration of the life of such a muscle is the same whether it contain blood or has been freed from this, it is evident that the quiescent blood has not the least share in the respiration, and in determining the duration of the contractile capability of the muscle.—*Monatsbericht of Berlin Academy.*

M. NEUCOURT ON NEURALGIA OF THE BRACHIAL PLEXUS.

This form of neuralgia, which has excited but little attention, should be placed, M. Neucourt considers, as regards frequency, between neuralgia faciei and sciatica. Pain is, of course, a chief symptom, but it exists in very various degrees, from that which scarcely calls for attention to the most exquisite. In some cases, too, whatever is done, it obstinately continues ; but in most, in proportion to the duration of the disease, its severity abates. Although with this spontaneous pain, there is usually associated pain on pressure, the latter is sometimes quite absent, while in other cases it may be so marked as to become a true dermalgia. Pain on moving the arm is a very constant symptom, even when the other two forms are absent, the least movement sometimes causing such suffering as to compel the patient to keep himself quite motionless. Sometimes it is only certain movements that are painful; and when there is great pain on movement, there may be none from pressure. Spasmodic muscular action sometimes is symptomatic of neuralgia, and may take place without pain, and has often been described as idiopathic muscular contraction. Muscular paralysis is another occasional consequence of neuralgia, especially when the pains have been intense. The deltoid is oftenest affected. Each portion of the brachial plexus may be the seat of the neuralgia, which may thus be termed cervical, scapulo-thoracic, or humero-palmar, according to which portion is chiefly implicated. All may be so, but usually a portion only is ; the cervical is the least, and the thoracic the most frequent. It is rare to find the pains following the direction and distribution of the nervous branches, they being usually confined to some limited region, as the point of the shoulder, lateral part of the chest, elbow, &c. There is rarely any fever present, the pulse being usually quiet. Insomnia is a marked symptom, even in the absence of severe pain. With respect to the prognosis of the disease, it may be observed, that in its acute form it is often of no great severity, and soon disappears even without aid ; but in other of such cases, the pains are excessive, and resist the operations of remedies with obstinacy, which, however, when they do not relieve the pain, often may prevent the affection falling into a chronic condition. The worst cases are those which are originally chronic, coming on imperceptibly at first, and gradually increasing in severity and obstinacy. In several cases the disease attacks persons apparently quite well, and without any obvious cause. Still external agents exert a great influence in determining diseases that are especially attended with pain, and this one offers no exception—great extremes of cold and heat being common exciting causes of it.

Treatment.—Some of the cases pursue their course in spite of all treatment, and yet get well whatever means be used, so that it is often difficult to assign the share due to nature and that due to the remedy. In others, however, long left to nature without improvement, the efficient aid of medicine is undeniable. Leeching is very useful in the strong and plethoric, and emollient cataplasms are valuable adjuvants, or in other cases substitutes. A plaster of treacle, powdered with opium and surrounded by diachylon, forms a good application, as does a liniment formed of one ounce of almond oil and six to eight grains of hydrochlorate of morphia. As antiphlogistics act best in the strong and plethoric, so are narcotics best adapted for delicate and nervous subjects, failing in the former unless preceded by bleeding. After these two classes of means, revulsives often exert a decidedly good effect, and in particular cases various remedies, as champooing, acupuncture, electropuncture, and the iodide of potassium are useful. Sudorifics are not useful remedies, though sweating from a vapour-bath has proved very efficacious.—*Archives Générales.*

ON PARTURITION AFTER THE DEATH OF THE MOTHER.

By Dr. SCHNEIDER.

Dr. Schneider, called to a case of labour at a distance, found the woman had been dead an hour and a-half when he arrived. As, however, a foot of the child presented, he rapidly delivered her of a still-born infant, which was restored to life. Dr. Naumann relates, in *Hufeland's Journal*, Band 23, the case of a woman who had died during labour, in the summer of 1802. As the child was believed to have died some time before she did, no attempt at delivery was made, and putrefaction of the body of the mother had commenced, when, on the evening of the second day, the child and placenta were found expelled, and lying between the legs of the mother, some bleeding having also occurred. A yet more remarkable case is detailed by Hermann, of Berne, in the *Med.-Chir. Zeitung von Salsburgh*, 1824. It occurred in the person of a young woman, who died of a nervous fever in the sixth month of her pregnancy ; and on the eve of her burial, on the third day, when her body had far advanced in putrefaction, a loud sound was heard, and an unbroken ovum, containing twins, was found to have been discharged, the placenta alone showing some signs of putrefaction. In the first volume of " Stark's Archiv." is a case of spontaneous evolution taking place after death, so that the child was born. Both Wegelin and Kulmus have written dissertations *de infantis post matris obitum partu.*—*Casper's Wochenschrift.*

PHYSIOLOGY OF THE NERVOUS SYSTEM.

Some years ago M. Matteucci discovered the curious fact, that when a muscle contracts on which a nerve distributed to another muscle rests, then this latter muscle contracts likewise. M. Matteucci gave the name " induced" to this species of contraction, which M. du Bois Raymond explained, and called secondary.

M. Brown-Sequard, in following up this interesting subject, has shown :—

1. That this secondary contraction is extremely feeble whenever the inductor-muscle contracts without meeting with resistance, as after the section of its tendon, for example.

2. That a tendency to, or effort at contracting in a muscle, is sufficient to produce the secondary effect; and that the latter is directly proportionate to the energy of the former.

3. That when the irritability of a muscle is very great, mere traction of its fibres in a longitudinal direction is sufficient to induce secondary contraction.

4. That the sensitive nerves connected with a muscle in contraction are excited in the same manner as motor nerves, and according to the same ratio.

M. Brown-Sequard conceives that these facts serve to explain many obscure points in physiology and pathology. Thus we know, from experience, that the severe pain which attends fissure of the anus is aggravated by elongation of the sphincter fibres, while division of that muscle either removes or greatly alleviates the pain. This fact receives a ready explanation from the above propositions. When the sphincter contracts, the sensitive nerves running along its surface, or distributed in its interior, are excited, and, as the contractions are exceedingly violent, so is the pain very severe. After division of the muscle, however, contraction of the muscular fibres takes place without any resistance, and the pain consequently disappears. In certain cases of painful contracture, the same effects are produced. Thus, we increase the pain by endeavouring to extend the contracted muscle; we diminish it by extending the antagonist muscles ; we cure it by division of the tendon.

The intense pain during labour is easily explained by the excitation which violent contraction of the muscular fibres occasions in the sensitive nerves of the uterus. The same mode of explanation applies to cramps, convulsive spasms, and neuralgic affections, in which the slightest muscular action gives rise to pain.

Finally, the " recurrent sensibility" of Majendie is easily understood, when we reflect that the contraction of a muscle excites the sensibility of nerves in contact with, or distributed through them. The anterior roots of the spinal nerves are motor, yet when we excite them we produce pain. But this arises because they produce, when excited, contraction of the muscles ; and this contraction, again, produces increased sensibility or pain in the sensitive nerves connected with the muscles so contracting.—*Transactions of Biological Society.*

GENERAL CORRESPONDENCE.

MEDICAL ETHICS.

[To the Editor of the Medical Times and Gazette.]

Sir,—We are instructed by the Committee of the Manchester Medico-Ethical Association to forward to you the accompanying correspondence for publication in the *Medical Times and Gazette.*

Having, in a previous instance of the same kind, remonstrated with Mr. Windsor without any success, the Committee consider

that they have no other means of dealing with the case, than by bringing the facts to the knowledge of the whole Profession.

We are, &c.

JOHN AIKENHEAD, } Honorary
W. C. WILLIAMSON, } Secretaries.

112, Oxford-street, Manchester.

(Copies.)

Manchester, Piccadilly, Dec. 24, 1851.

Dear Sir,—I forward to you the enclosed correspondence, which, as one of the secretaries of the Medico-Ethical Association, you will deal with in the manner you deem best.

The statement contained in Mr. Windsor's last communication I know to be incorrect. He has been misinformed; the facts are precisely as stated in No. 7 of the series. I felt, however, no necessity for replying further, as their bearing is purely personal, not professional. On every other ground but this latter one, I should have treated Mr. Windsor's conduct with contemptuous disregard. I am sure, that in this case you will, on Mr. Windsor's account, feel with me more of sorrow than of anger. Yet, when such flagrant infractions of professional morality as those disclosed in the accompanying correspondence obtain with a practitioner of forty years' standing—an Honorary Fellow of the College of Surgeons, and senior surgeon to an hospital, I think it becomes a duty to notice such conduct in some form or another; and it is in this view of the case that I send you the correspondence.

I am, dear Sir, yours faithfully,

Dr. Aikenhead. DANIEL NOBLE.

(No. 1.)

Piccadilly, Sunday Afternoon.

Dear Sir,—Last evening I was sent for to see Mrs. —— of —— road, after being with whom for nearly an hour, I prescribed and left word that I should call again early this morning. I had already told them I could not recognise, or in any way act with the previous attendant, who, I understand, possesses no qualification for the duties he has undertaken, and the title which he has assumed. I have to-day receive an intimation that my further services are dispensed with, because you, less scrupulous than myself, see no difficulty in sanctioning and in co-operating with the person I had declined to meet; and, in fact, that you had entered upon an attendance under the circumstances in question. I do not complain of this conduct in reference to myself; I seek for no explanation; but I deem it right that you should not be unacquainted with any of the circumstances of the case, and I regret exceedingly that so flagrant a disregard of the first principles of medical ethics should have been shown by you, one of the oldest and most successful members of the Profession in Manchester. Yours truly, DANIEL NOBLE.

J. Windsor, Esq.

(No. 2.)

Piccadilly, Sunday Evening.

Dear Sir,—I have just received your note, and am very sorry that anything should have occurred unpleasant to yourself. The circumstances are these:—After I had gone to bed last evening, I received an urgent message to visit Mrs. —— of —— road. On arriving there, I found Mr. Hughes in attendance at the house; that he had attended her in her confinement about a week previously, and had subsequently been in regular attendance. I knew nothing of your attendance until I had been some time in the house, when I was informed of it, and your prescription was shown to me. You had prescribed, I believe, tinct. opii, sp. ammon. fetid. and mist. camphor., but I am not quite certain; and I was informed of your having stated to the family, that you did not consider the case as one of any danger. I must confess, that I had a very different impression of it, and cannot but suppose that it must have considerably changed its character in the interval of our respectively seeing it. She had been wildly delirious, with screaming and restlessness; her pulse 130 a minute, and of a strong bounding character. Under these circumstances, though I should have been truly glad to have done so, I could not sanction the immediate propriety of your prescription. Although I had not had any professional or other communication with Mr. Hughes for a very long period, I knew nothing, whether or not he had yet become a qualified practitioner. I stated my opinion of the case to him, and that the only safe treatment of it should be at once actively and decidedly antiphlogistic. Though I found her rather better this morning, and by no means out of danger, I am of opinion that any other plan of treatment than the one I thought right to suggest, would have involved the greatest risk of her life, and I could not, under the circumstances, conscientiously decline interfering, as I otherwise should have been glad to have done.

Yours truly,

D. Noble, Esq. JOHN WINDSOR.

(No. 3.)

Piccadilly, Monday Morning.

Dear Sir,—Permit me to ask you, with the respect due to one so much my senior as yourself, whether a difference of opinion concerning a case constitutes a sufficient reason for setting aside a regular practitioner and taking up with one notoriously disqualified? I do not complain that your opinion was different from mine, but of the conduct which ensued. I submit, that you should have procured my personal attendance once more, ignoring the person you consulted with; when, if I had failed to convince you that the prominent features of the case were hysterical and adynamic rather than inflammatory, or contrariwise, it would have been for one of us to retire by common consent, unless a third had been called in to reconcile our differences, or to give preponderance to the opinion of one of us.

I only regret this circumstance on personal grounds; had it occurred with one to whom I was a comparative stranger, I never should have noticed it. That you should so have acted is yet past my comprehension. Yours truly,

John Windsor, Esq. DANIEL NOBLE.

(No. 4.)

15, Piccadilly, Dec. 22, 1851.

Dear Sir,—I received your second note this morning; but, considering my former reply sufficiently explanatory, I have little to add.

* * * * * *

Both the patient and her husband, I am informed, had long been particular acquaintances of Mr. Hughes, who was very anxious about the case, and suggested my advice on the occasion, which I have endeavoured to give, at least conscientiously, and, if I could have helped it, without offence to any one.

Yours truly,

D. Noble, Esq. JOHN WINDSOR.

(No. 5.)

Piccadilly, Monday Evening.

Dear Sir,—* * * But once more I must urge upon you, that about any difference of opinion, or any question of personal grievance, I repudiate all concern. My complaint is of the grave offence which you have committed against the Profession to which we respectively belong, and I must really insist that the actual point at issue you entirely evade. I presume that this most unpleasant correspondence must now close. I think it right, however, to inform you, in conclusion, that I purpose placing it in the hands of the Secretaries of the Medico-Ethical Association,—remaining, meanwhile, yours truly,

J. Windsor, Esq. DANIEL NOBLE.

(No. 6.)

Piccadilly, Tuesday Afternoon.

Dear Sir,—I received your third note this morning, and in conclusion will make a few observations, chiefly as a brief recapitulation of the whole affair. * * *

With regard to my conference with Mr. Hughes, the regular attendant in the case, which you seem to consider the gravest part in the matter, I must frankly acknowledge that I saw no objection in receiving from him, one who had gone through a regular professional education, though not yet possessed of a diploma, the history of the case and the treatment hitherto pursued. On the day following my first visit, I might have called upon you to explain verbally the circumstances which had occurred, but was excessively hurried, as, indeed, I have been ever since, and your first note on Sunday evening seemed to supersede that, perhaps, more satisfactory mode of explanation.—Yours truly,

D. Noble, Esq. JOHN WINDSOR.

(No. 7.)

Piccadilly, Tuesday Evening.

Dear Sir,—Respecting the pathology of Mrs. ——'s case, I will enter into no dispute; the greater your difference of opinion with me, the more weighty, I maintain, were the reasons for your requiring my attendance in consultation, before you offered an opinion or prescribed. I have only this afternoon been informed, upon unquestionable authority, that the family did not call you in at all, but the irregular practitioner before referred to; that Mr. —— knew nothing of your coming until he saw you in his house in the company of the person who had been virtually dismissed; that upon learning the immediate antecedents, you asked to see my prescription, and, upon it being shown, pronounced at once a decidedly unfavourable judgment upon what I had done. Is it wonderful, that upon this you were chosen to continue in charge of the case; you, upwards of twenty years my senior? If you see nothing objectionable in the practice of meeting in consultation

persons unqualified, you are simply at issue with the worth and respectability of the whole Profession.—Yours truly,

J. Windsor, Esq. DANIEL NOBLE.

(No. 8)

Piccadilly, Tuesday Evening.

Dear Sir,—I have received your note this evening, and although I intended my last to you to be a concluding one, I am induced by yours to add one or two remarks. I have had an opportunity since receiving it of making some inquiry, and am assured that Mr. Hughes had the sanction both of Mr. —— and other parties before I was sent for. I was also informed at the same time, that your own visit was not known to the family before your arrival; that from the great suffering of the patient, the opinion of Mr. ——, druggist, had been asked, and he, of his own accord, had sent for you.

In conclusion, I may say, that I choose to make a considerable distinction between those who have been educated regularly and pursue a regular practice, and those who are mere charlatans, or practice irregularly, as homœopathists, hydropathists, etc.—Yours truly,

D. Noble, Esq. JOHN WINDSOR.

[We have omitted from the letters Nos. 4, 5, 6 of the above correspondence, those parts which were mere repetitions of matters detailed at full in the earlier letters.—ED. *Med. Times.*]

MR. QUEKETT'S NEW THEORY OF THE FORMATION OF CALCULI.

[To the Editor of the Medical Times and Gazette.]

SIR,—The remarkable conclusion at which Mr. Quekett has arrived in regard to the formation of urinary calculi, must have excited surprise in the mind of every one who has become acquainted with it. It bears the stamp of improbability at first sight; it is opposed to all we know in regard to the nature and formation of calculi. These considerations must, nevertheless, not be allowed to set it aside.

The constant examination of urinary deposits, etc., for many years, has made me acquainted with the nature and cause of the production of the so-called cell-wall, and I do not hesitate to state, that it is not really an organic cell-wall. I can prepare it artificially and beautifully from lithic acid, precipitated artificially from filtered urine by an acid, and in just as great perfection as that in which it is seen in the deposit of carbonate of lime from the urine of the horse. Its nature varies according to the composition of the concretion in which it is produced.

The organic cell-wall, in the case of the above concretions from the urine of the horse, like the first stage of the cholera fungus, resists a red heat.

Take some of the above deposit, add to it some pretty dilute acetic acid, the cell-wall will be left whilst the central earthy matter is dissolved. If the acid be strong, the whole disappears,—is dissolved,—and the cell-wall can no longer in any way be reproduced.

Next, take some more of the same deposit, heat it on a thin glass slip, or platinum-foil, over a spirit-lamp. It first dries, then blackens, and, if held in the hottest part of the flame, it ultimately becomes perfectly white,(a) and all the organic matter, (including the organic cell-walls of course) is completely dissipated.

On treating it, however, with acid, as before, the cell-walls are seen as perfect as ever. In fact, the whole is a delusion.

I have merely selected this instance, as the one principally dwelt upon by Mr. Quekett. I am, &c.

J. W. GRIFFITH, M.D., M.R.C.P., &c.

9, St. John's-square.

REMARKS UPON THE LITHATES OCCURRING IN THE URINE.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the last number of the *Medical Gazette*, Dec. 19, 1851, I find some remarks by Dr. Inman, of Liverpool, tending to throw a doubt upon the fact of the occurrence of the lithates in the urine in a globular form. As the author has almost stumbled upon a phenomenon of importance which has been familiar to me for some time, viz., the occurrence of the lithates within organic cells; and as I was the first in this country to confirm M. Vigla's statement in regard to the existence of the globular lithate, I shall take this opportunity of making a few remarks upon these subjects.

The globular crystals of the lithates are most frequently met with in the urine of children affected with scarlet fever. They possess none of the characters of the spores of either fungi or algæ. They constitute, in fact, minute calculi, composed of very small needles, radiating from a centre; their surface is almost invariably covered with little needles. They are brittle, and may be crushed between two pieces of glass; they then break principally in the direction of the radiating lines above mentioned, the fragments being angular. They polarize light, exhibiting a black cross and coloured rings. They may be prepared artificially. Those I have in my possession vary in size from about the 1-4000th to the 1-400th of an inch. They are very compact and hard, and are not so readily acted upon by chemical re-agents as the ordinary pulverulent lithate; this simply depends upon their being in a less fine state of division. Inattention to this point has, I believe, caused several errors in regard to the nature of deposits of the urates in this form

The other circumstance to which I should wish to allude, relates to the admission of the urates into cells of various kinds, in a state of solution, and their subsequent precipitation within(a) them on cooling, rendering them turbid and dark. This may be produced with any cells, and my attention was drawn to it two years ago, as forming the explanation of the nature of the dark organic cells met with in the urine of persons affected with morbus Brightii, and which have hitherto remained an enigma. These I believe to consist of renal epithelial cells, filled with the lithates. The nature of the so-called spores, in the communication of Dr. Inman, appears very doubtful. They were coloured blue by iodine, hence they could not be spores, unless they had previously been acted upon by some chemical re-agent. Nor can we be sure that they were particles of starch, as starch is not the only vegetable substance coloured blue by iodine. There can be no doubt, however, that they did not consist of the globular lithates, and this might easily have been discovered by the author, had he taken the trouble; the simple fact of the absence of the spicula from their surface, the occurrence of which has been pointed out by, I believe, every author who has alluded to them, should have directed the attention of the author to the error he was committing.

I am, &c. J. W. GRIFFITH, M.D.,

Member of the Royal College of Physicians, &c.

9, St. John's-square.

DR. GROVE ON THE EXCITING AGENTS OF ENDEMIC, EPIDEMIC, AND INFECTIOUS DISEASES.

[To the Editor of the Medical Times and Gazette.]

SIR,—The letter of Dr. Ayres, in your Journal of this day, will, I believe, be fully answered by the concluding portion of the paper which, with all deference to the Doctor, I think he has prematurely reviewed.

Perhaps, Sir, it would be as well that Dr. Ayres should hear me to the end of my short paper; and when he has so done he will be more likely to form a correct view of my real opinions, and estimate rightly the motives I have in opening up this very interesting inquiry. Are there any special agents of disease, and, if there are, of what nature are they, and what are the laws which govern them?—are questions which I am endeavouring to solve. I may here remark, that if one disease can be proved to depend upon the growth and development of cells, (I will not call them fungi,) it is quite sufficient for my purpose. Let me direct Dr. Ayres's attention to Dr. Berg's views on aphtha, an abstract of which he will find in Braithwaite's "Retrospect," Vol. XVI., page 151 et seq.; and also to the *Medical Times* for my paper on Aphtha; by these I think he will be able to arrive at more definite and accurate notions concerning epidemic and infectious diseases, as understood by me. I am, &c.

Wandsworth. JOHN GROVE.

MUSCULAR ABNORMITY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Knowing that you consider all deviations in the normal anatomy of the human subject worthy of record in your valuable Journal, I beg to forward you the following account of a remark-

(a) The blowpipe had better be used, to be sure that the whole of the organic cell-wall is dissipated. The acid used should be dilute; otherwise, as all the organic matter which retards the action of the acid upon the concretions, when these have not been heated, has now been dissipated, strong acid dissolves the whole, as in the former experiment, but, of course, much more readily.

(a) There is but little difficulty in distinguishing whether particles are within or upon the surface of cells.

able deviation which I have just met with in dissecting the upper extremity at the London Hospital.

On dissecting the skin and superficial fascia of the *pectoralis major* muscle, I found the muscle divided into two portions. The upper and smaller portion arose from a little more than one-third of the anterior aspect of the clavicle and border of the anterior portion of the sternum. The lower and larger portion arose from the lower end of the sternum and cartilages of 4th, 5th, 6th, and 7th ribs, its lower portion being connected with the external oblique. These two portions converged together, and at the front part, at the outer boundary of the axilla, were inserted into the anterior edge of the bicipital groove, the lower portion of muscle being attached internally to the upper.

In the interval between the upper and lower portions were observed the greater portion of the *pectoralis minor*, and part of the body of the 2nd rib and its cartilage, together with the cartilage of the 3rd rib.

Over the upper half of these two cartilages was inserted a tendinous and fleshy fasciculus, an inch in breadth in the middle, gradually contracting above and below, being prolonged below to the cartilages of the 4th and 5th ribs, and above terminating in a rounded tendon which glided over the sterno-clavicular articulation, too deep to be internally connected to the outer border of the sterno-cleido-mastoideus; so that the latter muscle had this fasciculus as an additional origin.

The same irregularity was not observable on the other side.

I am, &c. A. NELHAM.

London Hospital.

[We notice with pleasure Mr. Nelham's communication, being convinced that the study of the proper signification of abnormities will contribute much to raise human anatomy from its present humble position to the rank of a science. Students are taught the principles of physiology; why should they not also be taught the principles of anatomy, by which they might understand how one type may be adapted and made subservient to an infinity of special purposes?

The simplest muscular type consists in a tendinous and fleshy slip passing between two contiguous vertebræ. Should, however, parts of a vertebra become displaced from their natural connexions, highly developed and moveable, as is the case with those bones of the cranium which are usually called "the bones of the upper extremity," the muscular fibres attached to them require a more extensive origin. The additional slips are the most subject to "abnormities."

Meckel, one of the early collectors of anatomical anomalies, says, speaking of the pectoralis major, "The clavicular portion of this muscle is very often entirely separated from the sternal portion, so that a considerable space exists between them, and on the anterior edge of the latter we see several fissures of different depths. The formation is very analogous with that of the mammalia, in most of which the pectoralis major muscle is divided into several distinct muscles." In Mr. Nelham's case, one of these central muscles is absent.

The straight slip passing to the sterno-mastoid has been described under the head of "Sternalis Brutorum," and is a continuation of the recti muscles, or the "interspinales," on the hæmal aspect of the trunk.

For particulars as to this muscle, see Cuvier's Leçons d'Anatomie Comparée; Sandefort de Musc. Nonnullis qui Rarius Occurunt; Meckel de Monst. Duplicitate. The subject, however, is quite in its infancy, and will well repay the labours of any anatomist desirous of acquiring a reputation.—ED. *Med. Times and Gazette.*]

MEDICAL BENEVOLENT FUND.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your correspondent "M.D. and M.R.C.S.," appears to have fallen into the very common error of supposing that the Medical Benevolent Fund was a Provident Fund, and that a subscription to it would be attended with advantage to the subscriber. This is purely a mistake; the Benevolent Fund is entirely a charitable fund, and no other advantage will accrue to a contributor than that which results from the consciousness of doing good, and from the conviction of performing his duty in the position "in which it has pleased God to place him." Man was not created for himself—he is a gregarious animal—he is placed in society with social feelings and affections, and amenable to social laws; and he will fulfil the great end of his being in proportion as he is guided by these feelings and obeys these laws. It is, then, quite true, that man should be provident, for this is a duty which he owes not only to himself and to those immediately dependent upon him, but to society at large, that, by timely care, and thrift, and forethought, he may keep himself from becoming a burden upon the large social family of which he is a member. But, as your correspondent remarks, "the young and strong should pay something towards the support of the old and infirm, whom they are daily pushing off the field:" in other words, they should recollect that there is a duty to perform to others as well as to themselves. Now I cannot go on with your correspondent to say, that we should "be provident before we are generous." I would say, we should be provident at the same time that we are generous; the two principles of providence and charity should be simultaneous in their operation; the one is as much a duty as the other, and they should never be separated. Let man provide what he may, there is no possibility of extinguishing misfortune, or of absolutely guarding against its occurrence; and while it becomes every person to lay by him in store against the evil day, it equally becomes him to accumulate a fund against those inevitable misfortune which, by his providence, he has been unable to supersede. While, then, I would most earnestly exhort every young man to avail himself of the means offered by the many Provident Societies of the day to secure himself, as far as possible, from the contingencies of after life, I would also implore him not to forget the equally imperative duty of charity; and, at the same time, to enrol his name among the subscribers to the Benevolent Fund, that he may fulfil the great end of his mission on earth, and contribute to the relief of that misery which is afloat in our Profession—a misery which few can know, and fewer still appreciate. After a few weeks I shall return to this subject more at large; and in the meantime, I remain, &c, W. NEWNHAM,

Treasurer to the Med. Benevolent Fund.

ST. MARY'S HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the announcement of a work on Operative Ophthalmic Surgery, by Mr. Haynes Walton, I erroneously designated that gentleman Ophthalmic Surgeon to St. Mary's Hospital. As the advertisement has appeared in several journals, I wish to take the earliest opportunity of correcting the error, and of stating that Mr. White Cooper is the Ophthalmic Surgeon to that Institution.

I am, &c. JOHN CHURCHILL.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. P. M. LATHAM, President, in the Chair.

Dr. Quain presented also a specimen of

FATTY DEGENERATION OF THE HEART, CAUSING DEATH BY RUPTURE.

The heart, for an opportunity of examining which, as well as for several details of the case, he was indebted to Dr. Drury, was removed from the body of a lady of rank, aged sixty-eight years. This lady had been peculiarly subjected to distressing accidents in her family, which had naturally caused her much mental anxiety. For the last ten years she had been remarked as being nervous, and irritable, frequently passing her nights without sleep. She latterly felt most things a trouble to her, and two years ago left Tunbridge Wells, owing to the inconvenience which the hills of the district caused her. She frequently complained of being bilious, and referred to the sternum, as the seat of heaviness and oppression. She had occasional cough, with expectoration. Her usual medical attendant (Mr. R. F. Brown) informed him (Dr. Quain), that though frequently complaining, she was never regarded as being seriously ill, and that some two or three years ago or more he had attended her for two or three small abscesses which had appeared on her neck. About six or eight months subsequently, whilst this gentleman was attending some other member of the family, this lady requested him to feel her pulse, observing, that she was "sure it was not a good one." He found it irregular and uncertain in its action. This state of pulse disappeared during a short attack of bronchitis which

occurred soon afterwards, but re-appeared as his patient got well. The pulse during this time was between 70 and 80. During two months before her death she was staying at Brighton, and whilst there complained of general *malaise*, of numbness of the fingers of the left hand, and of a tingling or uneasy sensation over the surface generally. She consulted a medical gentleman, who attributed her ailment to nervousness. She returned to London in this condition on October 10. October 19, at half-past six in the morning, she had a rigor, with nausea and "spasms in the stomach," which lasted half an hour, and were so severe as to bend her double. She was relieved by sinapisms, mild antispasmodics, and rose at her usual hour, 8 a.m., to breakfast. Mr. Brown saw her subsequently, and found the pulse had altered from a full, though uncertain and irregular beat, to a small and contracted one. In the evening she was better. At 9 p.m., however, she had a second and a more severe attack. The pain extended to the back. She passed a quiet night. October 20, the bowels were relieved by castor-oil early in the morning; and at half-past ten she had a third attack. She was sick twice during the day, and expressed her conviction that she was more seriously ill than was supposed by her family, and that she should die suddenly. At 10 p.m. she was seized while lying in bed, and about to take some arrow-root, with a fourth spasm. She shrieked loudly, raised herself in bed, or attempted to do so, and died instantly.

Post mortem.—The body generally abounded in fatty tissue. The organs were healthy, except those about to be mentioned. The pericardium was distended by sixteen ounces of blood partly coagulated. This blood had escaped from a rent in the anterior wall of the left ventricle one inch in length, parallel with and close to the septum. There was no very great amount of fatty growth on the heart, but in the neighbourhood of the rupture, and onwards to the apex, the muscular fibre had undergone fatty degeneration to a very marked degree (specimen of oil-globules within the sarcolemma were shown under the microscope.) It was of interest to observe, that other parts of the heart showed the muscular fibre to be in a remarkably healthy condition. There was thus, in fact, almost a local or circumscribed degeneration, which, it was further of interest to observe, was connected with a branch of the coronary artery distributed to this part of the heart, and which was nearly occluded by calcareous degeneration of its coats. The liver was greatly enlarged and fatty.

Dr. Quain said, that the present was an extremely good example of this morbid condition, which had been, as he thought, very appropriately named fatty degeneration of the muscular tissue of the heart, as distinguished from the mere growth of fat on the surface, and also of one of the conditions, viz., obstructed circulation in the coronary arteries, on which this morbid state depends. It was likewise a good illustration of the connexion between rupture of the heart and fatty degeneration of the fibre. He remarked, in reference to the diagnosis of this affection, that there were sufficient facts in the preceding history, if attention had been directed to them, to justify more than a suspicion of the existence of this or of some allied state of the heart's texture, which then might have obtained further attention and watching. He, and not only he, but others, had found many of these cases, in the earlier stages, amenable to treatment, while in the more advanced, a knowledge of this existence led to those precautionary measures being adopted, which would in many cases protect life from a sudden termination, a result which had been made familiar to the public by several remarkable instances of the occurrence of this calamity during the last few months.

Dr. Beith also exhibited, for Mr. Dickson, several

A PORTION OF THE RECTUM WHICH, HAVING PROTRUDED, HAD BEEN CUT OFF.

The person on whom this operation had been performed had suffered severely from intermittent fever, and was much debilitated from its effects. While a convalescent, he was attacked with acute dysentery; and, during the efforts to relieve the bowels, a prolapse of the rectum occurred, when, experiencing insuperable difficulty in its reduction, he requested a non-professional friend who had called upon him, to be so *obliging as to cut it off*. This request was complied with, to the satisfaction and present relief of the sufferer. The bowel removed, when examined subsequently, was found to have been cut off by an irregular and oblique incision, so that it was of the extent of three inches on one side, and only an inch and a quarter on the other. On a close examination it was found, that the specimen was composed of all the tissues of the gut. Urgent symptoms set in on the second day after the removal, when more of the rectum was extruded, and subsequently removed by operation, in consequence of the impossibility of treating it by any other method. The patient subsequently recovered.

ANNIVERSARY MEETING.

Three Fellows were elected, and certificates in favour of five candidates for membership were read.

The Secretary read the Report of the Council, of which the following is an abstract:—During the past session twenty-six new members were elected, being a great increase upon the elections of any previous year; this fact, coupled with the comparatively few resignations, formed the subject of congratulation. The financial statement was very satisfactory; the balance for the session 1849-50 left the Society in debt to the Treasurer to the amount of 11*l.* 2s. 4d.; the income for 1850-51 was 201*l.* 15s. 6d., the expenditure 161*l.* 10s. 1d., leaving a balance in favour of the Society of 40*l.* 5s. 5d. The Council, therefore, expressed the hope that ere very long they would be able to invest a part of their balance in Government Securities. The communications brought before the Society during the past session were most numerous, and many were of high interest and much value. The Fifth Number of the "Transactions," lately distributed, showed the interest taken in the Society, and justified the sanguine expectation of its increasing success and its more general appreciation by the Profession. To ensure this, the Council had made arrangements to secure the publication of their communications in the weekly medical journals, by which their proceedings would be better known, and their success ensured by inducing many to join them. The valuable present of a microscope made to the Society by Dr. C J B. Williams was spoken of, and its general utility to, and use by the members, at the meetings adverted to. The Report terminated by eulogizing the conduct of their late Secretary, Dr. Peacock, and of Dr. Latham the President, the Council stating their conviction that the satisfactory condition and progress of the Society are very much to be attributed to the assiduity and zeal with which Dr Peacock fulfilled the duties of his office. They also recorded their high sense of the many and material benefits conferred on the Society by Dr. Latham during the two years he has presided over their meetings, and they feel satisfied of the cordial and unanimous support of the members in recording their thanks and admiration for the judgment, the urbanity, and the talent he has displayed on all occasions

The Report was unanimously adopted; after which the following were elected the officers and Members of Council for the ensuing year:—As President, Cæsar H. Hawkins, Esq. As Vice-Presidents, P. M. Latham, M.D.; C. J. B. Williams, M.D., F.R.S.; Thomas B. Peacock, M.D.; H. Bence Jones, M.D., F.R.S.; Alexander Shaw, Esq.; Richard Partridge, Esq., F.R.S.; William Ferguson, Esq., F.R.S.; Edward Stanley, Esq., F.R.S. As Treasurer, James Copland, M.D., F.R.S. As Secretaries, Richard Quain, M.D.; George Pollock, Esq. As the other Members of the Council, John Hall Davis, M.D.; John Scott, M.D; Edward Bentley, M.D.; W Jenner, M.D.; W. M'Intyre, M D; W Brinton, M D.; Charles John Hare, M D.; J. W. Little, M D.; R. Beith, M.D.; T. Ogier Ward, M.D.; John Avery, Esq.; Prescott G. Hewett, Esq.; James Dixon, Esq.; John Gay, Esq.; W. Coulson, Esq; Alfred Poland, Esq; Samuel Solly, Esq.; William Adams, Esq; Robert Woollaston, Esq,; Carsten Holthouse, Esq.

Dr. Latham congratulated the Society on the election of Mr. Cæsar Hawkins, as the President of the Society. He, with his brother, Dr. Hawkins, was the inheritor of a great name; and he (Dr. Latham) believed that there was not a pupil of St. George's, who would not readily confess that he was indebted for the greatest part of his professional education to Mr. Cæsar Hawkins. He again congratulated them on his election.

Mr. Partridge rose to propose that the thanks of the Society be presented to Dr. Latham for his able services during the two years that he had occupied the chair. He referred to the diligence, assiduity, and patience he had displayed, and said, that he (Mr. P.) felt the Society was indebted, in a great degree, for the position it held, to the character of the gentlemen who had filled their chair, and to none more than to Dr. Latham, of whose great learning and reputation he spoke in the highest terms.

Dr. Bence Jones, in seconding the resolution, expressed his belief that it was one in which all would unanimously concur.

Carried by acclamation.

Dr. James Bird proposed a vote of thanks to the Council, the Secretaries, and the Treasurer, and said that their assiduous performance of their duties, entitled them to general approbation.

Dr. Sibson warmly seconded the proposal.

Carried unanimously.

The President returned thanks for the honour originally conferred on him by placing him in the chair. He thanked the Society for the exceeding respect and courtesy that had been manifested to him while he sat there; and he further thanked them for the expressions of approbation with which they had greeted his endeavours to perform the duties they had entrusted to him. For the last two years he had been called their President; he had great difficulty in regarding himself *ipso facto* in that character, for when he was there, he felt himself in the presence of the best minds in the Profession, and therefore they were not to be surprised that he had so often played the part of a listener,—of a learner, rather than of a magistrate. He considered the object of that Society to be the highest in the Profession; for if pathology is ever to take the place of a science, it must be based and built of such materials as they made it their business to seek out and examine. It is certainly a very great and difficult work; but he had every hope of the Society, and believed that they would advance that work, great and difficult as it is; for the Society contains no small measure of the genius, assiduity, and sound logic, which would ensure the establishment of pathological truth. The President concluded, by congratulating the Society of the advance it made daily, and said that he felt sure that their future labours would be for the benefit for mankind.

MEDICAL SOCIETY OF LONDON.

Dr. Murphy, President, in the Chair.

ENCEPHALOID DISEASE OF THE KIDNEY.

Mr. Greenhalgh laid before the Society a specimen of encephaloid disease of the kidney, weighing twenty-seven pounds; it was taken from a female 28 years of age, who had been confined about three weeks.

About nine years ago she received a severe blow upon the abdomen, which accident was followed by great tenderness in the left iliac region, hot and dry skin, thirst, and the ordinary symptoms of local inflammation, which were subdued by treatment. About six years ago, she first perceived a swelling occupying the left iliac fossa, which induced her to apply to Mr. Greenhalgh for advice The enlargement was then about the size of an ordinary fist, slightly tender on pressure, and very moveable. She complained only of occasional cramps and numbness in the left leg. Her general health was good. Iodine was given internally, and used externally; leeches were applied over the growth; pressure was also had recourse to. Subsequently the gums were touched with mercury, but without any apparent relief being obtained. During the last five and a half years she has passed naturally through three confinements at the full period. Each pregnancy the enlargement has considerably increased in size. The urine was natural in appearance and quality. Upon being tested on three occasions, it was slightly albuminous. All the other organs of the body were healthy, with the exception of the right kidney, which was in an advanced stage of Bright's disease. The mass was unattached to any of the surrounding viscera. Mr. Greenhalgh said that several medical men had seen this patient during life, and had pronounced the disease to be ovarian. He further added, that this case showed how difficult it is sometimes to diaguose these abdominal tumours.

M. JUNOD'S EXHAUSTING OR HÆMOSPASIC APPARATUS.

M. Junod, of Paris, exhibited an apparatus, contrived by him some time since, with the view of causing a vacuum over certain portions of the body, and thus acting as a derivant of the blood,—in fact, as an enormous cupping-glass. The power thus obtained is applied by him to the treatment of inflammatiou; the good effects of the abstraction of blood being procured without the usual debilitating results which follow the absolute loss of that fluid. M. Junod stated, that by means of this apparatus, four pounds of blood could be drawn into one leg only, the effect being doubled if both extremities be operated on simultaneously. The practitioner thus becomes the master of the circulation; he can reduce the pulse to a very small volume in a few moments, and can augment or diminish its frequency at will, without causing any immediate or ulterior inconvenience. The blood thus displaced, requires twenty-four hours in order for it to re-enter the general circulation, without re-action. One of the most important effects of this considerable derivation of the circulating medium, is an abundant perspiration; with that object in view, all that is necessary is to cause the first degree of syncope; the forehead is soon covered with perspiration, which speedily becomes general, if the patient be placed in favourable condition.

MEDICAL NEWS.

Royal College of Surgeons. — The subscribers to the Liston testimonial have just presented a bust of the distinguished original to the Council of this Institution. It is from the studio of Mr. Campbell, and well maintains the reputation of the sculptor by its fidelity, as well as a work of art. The Council-room of the College is now adorned with busts of the following illustrious departed members of the Profession:—Abernethy, Blizard, Cooper (Astley), Cooper (Samuel), Cline, Hunter, Home, Pott, and their late Majesties George III. and IV.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, January 1, 1852:—

Humble, George Arthur, Ludlow, Shropshire.
Stead, Joseph, Manchester.

Pathological Anatomy.—We understand that several of the Lecturers on Pathological Anatomy had an interview with a deputation of the Court of Examiners of the Society of Apothecaries, on Thursday last, respecting the anomalous position occupied by the subject they are engaged in teaching in the regulations of the Society.

Obituary.—On Dec. 20, at Cheltenham, James Arthur, M.D., R.N., Deputy Inspector-General of Hospitals.—On the 1st. inst., at Halstead-place, Kent, John George Children, Esq., F.R.S, etc. Mr. Children held the office of Secretary to the Royal Society for many years. On the 25th December, at Fulham, Caleb Basan, Esq., M.R.C.S.

Military Appointments. — Acting Assist.-Surgeon, P. M'Dermot, to be assist.-surgeon vice Bowen, promoted on the Staff. Hospital Staff: Acting Assist.-Surgeon, J. L. Jameson, to be assistant.-surgeon to the Forces vice Barrow, promoted on the Staff.

Naval Appointment.—Surgeon John A. Mould (1838) from the Ceylon to the Hercules.

Professor Owen.—The Profession, and the admirers of this distinguished comparative anatomist, will be glad to hear, that Her Majesty has given Mr. Owen the apartments of the late King of Hanover at Kew.

Royal Academy.—There are several distinguished candidates in the field for the appointment of Professor of Anatomy to this Institution, vacant by the resignation of Mr. Joseph Henry Green. It is generally understood, that the successful candidate will be Professor Partridge, of King's College,—an excellent artist and eloquent lecturer.

Trinity College, Dublin.—Dr. M'Donnell has been appointed Provost in place of the late Dr. Sadleir.

St. George's Hospital.—In addition to two Assistant-Surgeoncies in India, presented to this Hospital this year, the Son of Dr. Jenner has sent to the Museum the hide of the cow from which the first vaccine matter was taken. Sir Benjamin Brodie has presented the hospital with a portrait of the late Sir Everard Home, so long surgeon to the hospital, and some of the Governors have had Sir Thomas Laurence's picture of Dr. Thomas Young copied, and intend placing it in the board-room. Mr. Charles Hawkins has also presented a bust of Sir Benjamin Brodie.

Epidemiological Society.—A meeting of the Society was held on Monday, at the House of the Royal Medical and Chirurgical Society; Dr. Babington, the president, in the chair. Several new members and corresponding members were proposed, including professors and other medical gentlemen of Germany. A paper was read by Mr. W. J. Cox, of Kensal New Town, "On a Rational Treatment of Cholera." Drs. Babington, Snow, Sibson, Foucart, Mr. Walsh, and others took part in the discussion. After a vote of thanks to Mr. Cox, the President announced that Dr. Bryson would read his paper "On Epidemic Dysentery in China," at the meeting on the 2nd of February.

Sunderland Medical Society and Homœopathy.—A special general meeting of the Sunderland Medical Society was held at the Athenæum, on Monday evening, at eight o'clock, to memorialize the Royal College of Surgeons and Society of Apothecaries, London, respecting Homœopathy. There were present Dr. Brown, Dr. Burn, Dr. Bowman, Mr. Watson, Mr. Orton, Mr. Gregory, Mr. Hay, Mr. Shaw, Mr. Johnson, Mr. Dixon, Mr. Welford, Mr. Parker, Mr Blumer, Mr. T. B. Ward, and Mr. Nattrass. The memorial asks the College, "by an expression of opinion, to repudiate the doctrine of Homœopathy, and by a brand upon the name to sever, the existing association of the

quack with the legitimate practitioner." The memorial was unanimously adopted.

NON-RESTRAINT IN LUNACY.—TESTIMONIAL.—A late act of justice has been rendered to the originator of the non-restraint system, Mr. R. G. Hill, surgeon of Lincoln, by the presentation of a superb Testimonial, consisting of a very handsome silver centre-piece and tea-service.

THE MIDLAND OBSERVATORY.—The name of the gentleman who made the munificent offer to the town of Nottingham, mentioned in our last, was incorrectly given in the papers. It is Mr. Henry Lawson, of Bath—*not* Lawton.

ST. PETERSBURG.—Letters announce the death, at the age of seventy-one, of Dr. Christian Frederick Graefe, the well-known Hellenist and archæologist.

CHOKE-DAMP.—Mr. Gurney has successfully illustrated the azotic properties of choke-damp, by completely extinguishing the fire in Lord Bradford's coal mine, at Great Lever, near Bolton.

BARON A. PASQUIER, who was principal surgeon to Louis Philippe, and who was by his side at the moment when he left the Place de la Concorde in the hackney-coach, on the 24th of February, has just died.

METROPOLITAN INTERMENTS ACT.—Mr. Peacock's award relative to the purchase of the Brompton and Nunhead Cemeteries is abandoned, and thus all action as to extramural interment is suspended. Another plague or cholera epidemic might, perhaps, do some good.

PUBLIC BATHS AND WASHHOUSES are about to be opened for Blackwall, Poplar, and Limehouse.

SANITARY.—By a clause in the New City Sewer's Act, now in force, the provisions with respect to houses in a ruinous and dangerous state are extended to any house or building which, in the opinion of the Medical Officer of Health, is permanently unwholesome.

WATER GAS.—The necessary preparations have now been completed for lighting Dunkeld by this means, and on Tuesday evening a preliminary trial was made in presence of the patentee, Dr. Miller, of Manchester, and of other gentlemen interested in the gas manufacture. There is neither smell nor smoke emitted from the gas, nor during the manufacture, which are two important recommendations. Cheapness is also an element in the question. The *rationale* is:—Hydrogen is first extracted in a retort from pure water, and carried in the form of a flame to another retort in which the carbon is formed; and, combined, they are conveyed through a purifier, and thence to the gasometer.

LIVERPOOL.—At a meeting of the Cheshire magistrates, held on Monday, Jan. 5, a letter was read from Mr. Churton, the Coroner. We reprint such parts of it as bear on a case referred to in our last Number:—"• • • I well remember the constable of Budworth meeting me at Over, in the early part of December last, with a somewhat excited and unintelligible note from Mr. Rowcliffe, the surgeon of Tarporley, of which the following is a *verbatim* copy:—'Tarporley, Dec. 7, 1851.—Dr. Sir,—A case of death has occurred at Little Budworth, on the person of Robert Penkett, and I think of circumstances attending his illness and cause of death. I think it very necessary that an inquest should be held on the body.—Yrs. faith, J. H. ROWCLIFFE.' Having previously had some experience of Mr. Rowcliffe's meddlesome propensities, in causing unnecessary inquests, with a view of impugning the medical treatment of Mr. Meek, of Tarporly, I determined, before summoning a jury, to ascertain whether an inquest was required. With this view I saw Mr. Arrowsmith, the Registrar of Deaths for the Over District. I was told there had been reports about ill-usage, but Mr. A. believed the affair to be nothing more than another squabble between the Tarporley doctors. I was further informed that Mr. Swanwick, a very respectable medical practitioner residing at Over had attended the deceased for some time prior to his death; I therefore decided on taking Mr. Swanwick's evidence, conceiving it to be the best and most legitimate. • • • I certainly did not send for Mr. Rowcliffe, as I considered in a preliminary inquiry the evidence of one surgeon sufficient; and as Mr. Swanwick was clearly of opinion that the death resulted from natural causes, I think it would have been an act of indiscretion on my part to have burdened the case with unnecessary expense; Mr. Rowcliffe, therefore, did not receive his fee, neither had he an opportunity of saying any unkind things of his brother practitioner, Mr. Meek. • • • I remember hearing some rather strong expressions of dissatisfaction fall from some one after the close of the proceedings in reference to the conduct of Mr. Meek, and I suggested to the foreman that, if the jurors were unanimous in their disapproval of Mr. Meek's treatment, I would take a note of it, as it might act as a caution to Mr. Meek.—I remain, &c., HENRY CHURTON."

M. LIEBIG.—The Government of Bavaria are endeavouring to induce this distinguished chemist to leave the University of Giessen for the Chair of Chemistry in that of Munich.

ELECTROTYPE.—The *Athenæum* says:—"From very careful examination of the question, we have been long convinced that Mr. Thomas Spencer's claim to be the discoverer of the important electro-metallurgical processes is placed beyond dispute."

QUACKS AND THEIR ADVERTISEMENTS.—We congratulate the *Critic*, on having listened to the remonstrances of Dr. Cormack on the above subject. The following Advertisement appeared lately in that Journal:—"A speedy cure for stone and gravel will be sent to any person by enclosing thirteen stamps to Thomas Wilkinson, land agent, Gainsborough, Lincolnshire." The *Critic* says, after thanking Dr. Cormack for a remonstrant communication, "Assuredly the advertisements of Mr. Wilkinson shall not again appear; and, as regards all advertisements, vigilance as to their character shall be exerted." We wish that all Journalists would go and do likewise.

THE FIRST APOTHECARIES' HALL.—Chemistry and pharmacy are much indebted to the Arabs. They established in the 8th century the first public Apothecaries' Hall in Bagdad. Constantine, of Carthage, established the first regular pharmacy in Europe, namely, in Salermo. He called these establishments "stationes," and the dispensing chemists "confectionari."

THE JUDICIAL ATTACK ON THE PROFESSION.—The public are beginning to reap some of the benefits accruing from the unwarrantable attack by the Judges on the honour and honesty of the Medical Profession. The *Times* of Monday contains a letter from "A Freeholder of Surrey," stating, that whilst labouring under severe illness, he was summoned as a juryman to attend at Croydon. Being unable to do so, he forwarded a certificate to that effect from his medical attendant, a gentleman of high character and practice; but Sir John Jervis refused to look at it, and fined him 10*l.* for non-attendance, alleging that the medical man ought to have left his practice, and attended the court to make affidavit (!) of the fact. The "Freeholder" indignantly says, "This appears to be a most unjust and unheard of proceeding. Did the worthy Judge imagine that the signatures to the certificates were forgeries? or that any gentleman would condescend to plead a sham illness, to excuse his attendance upon any cause that could tend for the public good?—Or, again, that any medical practitioner of character would lend his name to that which might prove a palpable falsity?" It is clear that the Judge does think so, and it remains for the medical profession to correct his opinion, and meanwhile loudly to protest against such outrages. In this matter the "Freeholder" was not "alone in his glory."

THE NATURAL GAS on Chat-moss has been turned to practical account, having been applied to the boiler of a farm steam-engine.

FASTING.—The Registrar-General records the death of a Jew from exhaustion, caused by fasting according to his religious rites.

SIR JOHN FRANKLIN.—As bearing upon the probability of this gallant officer and his party's existence, it may be stated, that the returns of the Admiralty give the following items as to the provisions supplied to the Erebus and Terror:—Preserved meat, in tin canisters, 32,018 lbs.; soup, 17,416 pints; gravy, 2176 pints; vegetables 8076 lbs.; potatoes, 2632 lbs. Captain Penny writes from Aberdeen, that he lately had some conversation at Peterhead with Captain Martin, on the above subject, when the latter said, that during an interview with Sir John Franklin, in 1845, in Melville Bay, Sir John said, that "they had five years' provisions, which he could make last seven, and his people were busily engaged in salting down birds, of which they had several casks full already, and twelve men were out shooting more." Captain Penny adds, that to see such determination and foresight "is really wonderful, and must give us the greatest hopes."

IMPORTANT TO PROFESSIONAL MEN.—On Saturday week, the First Division of the Edinburgh Court of Session, in an application for an issue to go before a Jury, held, that the disclosure by a surgeon of the opinion (which was affirmative) he had given in a case where he had been called in to say whether a child, born six months after marriage, was full-grown or not, was relevant to infer damages against him, on the ground, that a professional man's opinion is taken on the footing of its being strictly private and confidential. If its disclosure is injurious to the party consulting him, he may be liable to him in damages.

CHARGE AGAINST A UNION SURGEON.—An inquest was lately held by Mr. Carter, the Coroner, in Gibson-street, Lambeth, on the body of a child, 7 years of age, deceased from fever. It appeared, that application was made to Mr. Beck, the parish surgeon, in the Westminster-road, whose assistant supplied some *unlabelled* medicines on several occasions, but did not visit the child, on the plea that he did not know it was a case of emergency. Mr. Beck was not informed of the case. The jury returned a verdict, condemning the conduct of the assistant, on several grounds. The practice of not labelling the bottles of medicine for the poor is a very dangerous one, nor can it be defended on any plea. Neither economy nor saving of time can afford an excuse for such negligence. We trust that Mr. Beck and all other union surgeons will see that the practice is abandoned; if not, we shall some day have a verdict of "Manslaughter" returned against the dispenser or his employer. The only thing that can be urged in favour of the assistant is, that no order for medical relief had been obtained by the sick child's friends. Our authority for this account of the case is a newspaper report, and there may be, therefore, some fact unexplained or unmentioned, which may give a very different view of the matter altogether.

[Advertisement].—TO THE MEDICAL PROFESSION.—The members of the Medical Profession are usually dependent upon their own personal exertions for their subsistence. If health fail, they fall into distress; if they die, their families are unprovided for.

The uncertainty of their incomes often prevents them from making provision for infirmity, old age, or death, by the usual methods of assurance. To meet this difficulty, The Law Property Assurance Society has made the following arrangements for the benefit of the Profession:—

1. It grants special policies of assurance, by which the assured, instead of being obliged to pay a fixed sum every year or forfeit their policies, may pay any sum they please, at any time, according to their means, and for which a proportionate sum will be assured to them by their policy. By this means uncertainty of income is provided for, and no forfeiture for non-payment ever takes place.

2. If the assurer in this office should find that the objects of his insurance after death are no longer required, he may convert his policy into an annuity for his own life.

3. On payment of a small annual sum during their own lives, husbands may secure annuities for their wives or daughters after their own decease.

4. On payment of a small sum annually, professional men may secure for themselves an annuity, to commence on the decline of life, or earlier, should they be at any time disabled, by sickness or infirmity, from pursuing their occupations.

Detailed prospectuses, forms of proposal, and every information, will be immediately furnished on application to WILLIAM NEISON, Actuary and Secretary, 30, Essex-street, Strand, London.

DEATHS *in the Metropolis for the week ending Saturday, January* 3, 1852.

CAUSES OF DEATH.	JAN. 3. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	593	445	258	1297	11850
SPECIFIED CAUSES	593	445	256	1294	11781
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	179	44	11	234	2325
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	4	22	21	47	570
3. Tubercular Diseases	59	123	10	192	1806
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	65	46	33	144	1375
5. Diseases of the Heart and Blood-vessels	3	46	20	69	416
6. Diseases of the Lungs and of the other Organs of Respiration ...	129	59	65	253	2414
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	19	24	15	58	650
8. Diseases of the Kidneys, &c. ...	1	7	4	12	98
9. Childbirth, Diseases of the Uterus	...	7	...	7	102
10. Rheumatism, Diseases of the Bones, Joints, &c.	2	6	2	10	83
11. Diseases of the Skin, Cellular Tissue, &c.	4	...	...	4	17
12. Malformations	4	...	...	4	27
13. Premature Birth and Debility ...	42	3	...	45	253
14. Atrophy	22	...	...	22	156
15. Age	...	...	55	55	708
16. Sudden	11	8	8	27	235
17. Violence, Privation, Cold, and Intemperance	49	50	12	111	546
CAUSES NOT SPECIFIED	...	...	2	2	69

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have just settled in a country village, and my first patient is a farmer, who, as I am informed, drinks to excess. Do you think, under such circumstances, that ten glasses of gin and water are likely to make him "fresh?" I am, &c. A. B. C.

[We think ten glasses of gin and water more likely to make him "stale."]

[To the Editor of the Medical Times and Gazette.]

SIR,—You will oblige me by the correction of some typographical errors in the report of my paper last week on the Endosmotic Action of Medicines. Instead of the diameter of the larger orifice of the reservoir being "an eighth of an inch," it ought to be 1·8 inch (an inch and eight-tenths.) Also, the results for solutions of sugar, sulphate of magnesia, common salt, and nitrate of potash, in half-an-hour, are given as 1-9th of an inch, 1 inch, 2 inches, and 1-8th of an inch; whereas the first should be 1·9 inch, (an inch and nine-tenths;) and the last ·8 inch (eight-tenths of an inch.)

I am, &c.

Bernard-street. C. COGSWELL, M.D.

Mr. Tylor's interesting cases of skin diseases shall receive early insertion.

A Very Poor Student is referred to our Student's Number. A little trouble will afford him the information he seeks; although it is not improbable that, on proper application being made, and good cause shown, *any* London medical school would grant him gratuitous tickets.

A Looker-on.—Our Contemporary, the "Lancet," boasts of its "popular" circulation. *Query:* has it not sacrificed its "professional character," in order to be admired by "the aristocracy and the learned professions of Divinity and Law?" Our boast is, that we are supported by the Medical Profession,—our aim, to be the organ of that honoured body. Our Correspondent is thanked for his suggestion.

Enquirer, Leeds.—The notice did not escape us. It is quite unnecessary for us, in our present unassailable position, to do more than quote the following returns, extracted from the Report of the Committee of the House of Commons on Newspaper Stamps. It will now be seen that, if it *is* "possible for a sexton to dig his own grave," it is equally possible for "an engineer to be hoist with his own petar." The following is the list of stamps issued for the year ending 31st Dec., 1850:—

Medical Times...	70,833
Lancet	63,812

We shall also publish the Returns for 1851, when they are made public.

Dr. Robertson, of Northampton.—We trust the conduct of our united Journal will prove satisfactory to Dr. Robertson. While we endeavour to advance science, and widely to disseminate sound views and modes of practice, we desire to temper our remarks with the spirit of conciliation, We war not with men but with opinions; and are quite sure that Dr. Robertson, a reviewer in the old "Edinburgh" in its most palmy days, would be the last to assert that opinions, particularly on practical points in medicine, ought not to be sifted, and thereby confirmed or refuted. We shall rejoice to number Dr. Robertson among our contributors. As regards the matter in question, ignorant as we were of all the parties, we did neither more nor less than literally follow the statement of the paper sent to us. If that were a misrepresentation, our columns are always open to right a wrong.

A note addressed to the Secretary at Apothecaries' Hall will relieve the mind of "An Anxious Apprentice."

Dr. Carr, Rusholme.—We are obliged to Dr. Carr for the particulars of the case of the late inquest at Rusholme, and of his application to the magistrate. We shall give the documents forwarded to us our most serious consideration.

A Student.—When the works we have on the practice of physic—we mean the good ones—are submitted to computation, and the amount multiplied by twelve, we suppose the number would be found to be something like a dozen.

One Interested in the Matter.—We made the assertion on what we conceived to be good authority.

COMMUNICATIONS have been received from—

Dr. CARR, of Manchester; Dr. BELCOMBE, of York; Mr. BARROW, of Ryde, Isle of Wight; F. F.; Mr. TYLER, of Charterhouse-square; Dr. FEARNSIDE, of Preston; Mr. RICHARDSON, of Mortlake; Mr. SOLOMAN, of Birmingham; Mr. JOHN CHURCHILL, of Princes-street; A. B. C.; Mr. BRANSBY COOPER, of Guy's Hospital and Spring-gardens; Mr. QUAIN, of University College and Cavendish-square; Mr. FERGUSSON, of King's College and George-street, Hanover-square; Dr. GREENHALGH, of Upper Woburn-place; Dr. RAMSBOTHAM, of New Broad-street and Portman-square; Mr. SIBLEY, of the Middlesex Hospital; Mr. HENRY SMITH, of Caroline-street, Bedford-square; Dr. THOMSON, of Radcliffe, Lancashire; Mr. BULLEY, of the Royal Berkshire Hospital and Reading; A VERY POOR STUDENT; Dr. COGSWELL, of Bernard-street; Dr. THOMAS WILLIAMS, of Swansea; Dr. MADDEN, of Crediton, Devon; ENQUIRER, Leeds; Mr. CURLING, of the London Hospital and New Broad-street; A LOOKER-ON; Dr. M'WILLIAM, of the Customs and Trinity-square; AN ANXIOUS APPRENTICE; Mr. SUTHERLAND, of Tarporley; Mr. JONES, of Llanfair; Mr. JONES, of the Jersey Hospital; Mr. WIBLIN, of Southampton.

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A Compendium of Domestic Medicine, and COMPANION to the MEDICINE CHEST.

Comprising Plain Directions for the Employment of Medicines—their Properties and Doses—Brief Descriptions of the Symptoms and Treatment of Diseases—Disorders Incidental to Infants and Children—Directions for restoring Suspended Animation—Counteracting the Effects of Poison—A Selection of the most Efficacious Prescriptions, and various Mechanical Auxiliaries to Medicine—the whole intended as a source of easy reference for Clergymen, Master Mariners, and Travellers, and for Families residing at a distance from Professional Assistance. By JOHN SAVORY, Member of the Society of Apothecaries.

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with Observations on the Use of Glasses. By W. WHITE COOPER, F.R.C.S., Ophthalmic Surgeon to St. Mary's Hospital.

"Those who cry themselves up provoke others to cry them down. The unpretending tone of Mr. Cooper's little volume on near and aged sight would be calculated, on the other hand, to win favour, although the merit of the book had not been equal to the modesty of the author. But it is the best of the kind, as well as the latest; nor could a better be desired. He has thought more of the public than himself; and while omitting nothing which a general reader could desire to know of glasses and eyes, not a sentence has been devoted to the display of his learning at the expense of his judgment."—Quarterly Review.

London: John Churchill, Princes-street, Soho.

Gratis with the "Dispatch" of Sunday, JAN. 4.

—The SUBSCRIBERS to the "WEEKLY DISPATCH" were PRESENTED with a highly-finished Coloured CHART, showing by diagrams, and at one view, the number of Persons who daily, during a period of five months, visited the CRYSTAL PALACE, the amount of money taken at the doors, and received from various sources, and other statistics of an interesting character. And on SUNDAY NEXT, JAN. 11, the CHART will be GIVEN to ALL PURCHASERS of the "DISPATCH" who are not regular subscribers. The Chart, which is surmounted with an Engraved View of the Great Exhibition of the Industry of All Nations, has been prepared by permission of the Royal Commissioners, from Designs by Corporals A. Gardner and J. Mack, of the Royal Sappers and Miners, and revised by a gentleman whose intimate acquaintance with all matters connected with the management, must insure its correctness—Orders may be given to all Newsvendors in Town and Country, or forwarded to Mr. R. J. Wood, 139, Fleet-street, London.

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This day is published, No. VI., price 2s. 6d., to be continued quarterly.

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"Common-sense statement, driven home by pointed illustration; the work now before us is conceived on these principles."—Edinburgh Review.

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LAYTONS.—A TREATISE on COPYHOLDS and COPYHOLD ENFRANCHISEMENT, containing the Practical Duties of the Steward, Bailiff, and other Manorial Officers; with Observations on the Sixth Report of the Copyhold Commissioners to Her Majesty's Principal Secretary of State to the Home Department, with the Report annexed. By ALFRED CASWALL, Esq., of the Inner Temple, Barrister-at-Law.

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To the Faculty.—Rheumatism, Cutaneous Eruptions, and Inflammatory Symptoms generally.—Measam and Co's. Medicated Cream,

which has now been used for upwards of twenty years in the largest Medical Establishments and Hospitals in England, and by some of the first Practitioners of the day, and has now become so essential in Surgical and Medicinal Practice generally, in consequence of the daily applications from the Faculty and Hospitals to be served with it in larger quantities at lower prices, will be sold to the Profession in jars of 7, 10, 20 and 32lbs. at a reduced rate, to enable them to use it for general purposes.

Sold at the Depôt, 238, Strand, Temple Bar, in pots, 1s. 1½d. and 2s. 9d.

The Truss.—(Class 10, Surgical Instruments,) SHOWN IN THE GREAT EXHIBITION.—

All Sufferers from Rupture, but especially those hitherto unsuccessful in obtaining complete relief, are invited to inspect NEWSON'S PATENT WIRE TRUSS—of the least possible size and weight, perfectly self-adjusting, without strap, joint, screw, or other complication;—it quite escapes detection. A copy of testimonials to its unequalled efficiency, from Dr. Babington, Professor Pergusson, and other high authorities, sent gratis on application. Entrance private. Mrs. Newson attends ladies. Hours from 11 till 7.—18, Percy-street, Tottenham-court-road.

Piggott's Galvanic Belt, without Acid

or any Saturation, and in a perfectly dry state, produces a continuous Current of ELECTRICITY, which pervades the system, and is found highly beneficial in NERVOUS SUFFERING. Mr. PIGGOTT'S BELT has received, during the last Two Years, the highest approbation of Medical Practitioners. It is free from Shock or other disagreeable sensation; it presents a Silken Surface to the Skin, is simple in its Form, and is not liable to break or become disarranged, nor to any other impediment to its Action, but will continue its use unimpaired for a long period. The Belt can be constructed for the Arms, Wrist, Leg, or other parts of the body. Price 7s. 6d. to One Guinea.—Mr. Piggott, Medical Galvanist, 523, New Oxford-street, Bloomsbury.

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Edward Spencer and Co., have published instructions for its use, which remove much of the inconvenience complained of in some cases, and give it increased adaptation.

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Davenport's Syrup of the Iodide of Quinine and Iron.

From Da. Golding Bird.

"19, Myddelton-square.

"I have now for some time employed pretty largely the triple Compound of Iodine, Quinine, and Iron, prepared by Mr. John T. Davenport, in the form of Syrup. I do not hesitate to express my opinion of its great value as a therapeutic agent. It has appeared to me that the Quinine assisted the assimilation of the Iron, and I have found it to be of very great value in cases in which the use of the Iodide of Iron is recognized. This triple Compound possesses many advantages over the simple Iodide, and not the least of them is the satisfactory manner in which it is tolerated by the stomach, especially if administered (as all preparations of Iron ought to be) immediately after a meal.

"Golding Bird, A.M., M.D., F.R.S.,
"Fellow of the Royal College of Physicians,
"Physician and Professor of Materia Medica at Guy's."

From Da. Geo. P. May.

"Having for some time past extensively used the ternary compound of Quinine, Iodine, and Iron, prepared by Mr. J. T. Davenport, I can with confidence testify to its marked efficacy in cases of Struma and Anæmia, and, indeed, in all instances in which the exhibition of Iron and its compounds is indicated. This preparation appears to combine all the therapeutic powers of its constituents without their nauseous qualities, which renders it an admirable medicine in the treatment of some of the disorders of childhood. "GEO. P. MAY, M.D.

"Maldon."

TARAXACUM (Davenport's) LIQUOR, or FLUID EXTRACT, Prepared by Spontaneous Inspissation, possesses every characteristic of the fresh Juice, and has proved highly efficacious where the ordinary Extracts have proved inert. Dose, a fluid drachm. 6s. per lb.

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(a) EXAMPLES UNDER TABLE C.

Age.	Sum Assured	Table A. Annual Premiums	Three years Premiums	Free Policy for	Five years Premiums	Free Policy for	Seven years Premiums
	£	£ s. d.	£ s. d.	£	£ s. d.	£	£ s. d.
25	1,000	22 4 2	66 12 6	68	111 0 10	110	155 9 2
35*	1,000	28 6 8	85 0 0	75	141 13 4	125	198 6 8
45	1,000	37 17 6	113 12 6	97	189 7 6	158	265 2 6

Age.	Free Policy for	Ten years Premiums	Free Policy for	Fifteen years Premiums	Free Policy for	Twenty years Premiums	Free Policy for
	£	£ s. d.	£	£ s. d.	£	£ s. d.	£
25	152	222 1 8	213	333 2 6	312	444 3 4	411
35*	175	283* 6 8	250*	425 0 0	369	566 13 4	478
45	217	378 15 0	300	568 2 6	424	757 10 0	537

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ORIGINAL LECTURES.

CLINICAL LECTURE

AT

University College Hospital.

By E. A. PARKES, M.D.

CHOREIC-LIKE MOVEMENTS OF THE RIGHT ARM AND LEG — DEATH—OLD SOFTENING OF THE CORPORA STRIATA —RECENT EFFUSION OF BLOOD INTO THE LEFT CRUS CEREBRI—ATHEROMA OF, AND OLD COAGULA IN, THE CEREBRAL ARTERIES.

Gentlemen,—The difficulty of judging of diseases of the nervous centres is generally acknowledged, and arises from the great number of lesions to which these organs are subject, from the diversity of modes in which these lesions may develope themselves, and from the variety of situations in which they may occur. Accordingly, from time to time, we meet with cases which may be regarded as exceptional to the general rules of diagnosis laid down upon this subject, and which rules are themselves, in the present state of knowledge, merely provisional.

The case to which I am about to call your attention was one of singular interest, and I have not been able to find in the records of medicine an exact parallel to it. It is that of a man named John Law, aged 67, who was brought to this hospital on Sunday, November 2, at four p.m. Our information regarding the previous history of this man is incomplete. It appears that he was a soldier, that he had served during many years in different parts of the world, and was now living on a pension. He is said to have been of temperate habits, and to have enjoyed good health up to June, 1849, when he had an apoplectic attack. He remained unconscious, according to his wife's account, for two or three days, and recovered from this condition with hemiplegia of the left side. At the time of his present attack, he had regained very considerable, but not perfect power over both arm and leg.

On the day previous to his admission, about 2 p.m., without premonitory symptoms, and being at the time in very tolerable health, he was suddenly seized with involuntary movements of the right foot. Subsequently these movements increased, involved the whole leg, and began to occur in the right arm also. They continued to increase in violence, and about 8 p.m. had reached the degree in which we saw them. There had been no loss of consciousness, no paralysis, no headache, no vomiting.

Twenty-six hours after the commencement of the attack he was admitted into the hospital. When I first saw the case (Sunday, Nov. 2, at a quarter to 7 p.m.) the man was lying on the bed, violently tossing about; the violence of the movements being such that I can scarcely hope to convey to you an adequate idea of them. I can only compare them with those of a violent paroxysm of mania. That it was a paroxysm of mania was, indeed, the impression produced on the mind by the first aspect of the case, and to a spectator not previously informed of the circumstance, it would have been a matter of surprise to find, on speaking to the man, that consciousness and intellect were perfect. These, in fact, were retained unimpaired from first to last.

The movements referred to, being particularly examined, were found to be the following.—First, violent movements of the right arm, of a peculiar character,—not common convulsive movements, not tetanic, but more like those of chorea. The arm was suddenly and violently thrown about in different directions, above the head, across the breast, to the side. After some minutes of this violent jactitation, a temporary cessation would occur, but only for a few seconds. By a strong effort of the will these movements could be momentarily controlled. The right leg was moving, but more feebly than the arm; the movements consisted of rapid extension and flexion, and of occasional rotation. The left arm was perfectly tranquil. The left leg was moving slightly, but this appeared to be no more than was induced by the movements of the body. Then, in addition to these movements of the right arm and leg, there were extreme movements of the trunk generally, so violent that it was impossible to tell whether they were confined to one side or not. So with regard to the neck; it appeared as if all the muscles of the neck were in action. The head was sometimes rotated, sometimes thrown violently backwards against the pillow. The effect of all these movements combined was to cause the man to roll over upon the right side, until sometimes he turned completely over. He then rolled back again, apparently by an effort of the will, but never turned upon the left side.

In addition to these movements, respiration was especially affected. It was much quickened; inspiration was short and difficult; expiration extremely prolonged, and apparently imperfect. The intercostal spaces at each inspiration became deeply concave, and during expiration convex. The delay in the pulmonary circulation was shown by extraordinary distension of the external jugular veins.

The other muscles of the body seemed little affected. The tongue was protruded well, and without deviation. There was no drawing of the face. There was no strabismus, neither were the pupils affected. He could swallow tolerably well, though with a little delay. He passed his urine twice in the hospital, and a third time made an ineffectual attempt. Articulation was distinct. The voice was a little husky, but the muscles of the larynx were perfectly unaffected.

Now, these choreic movements were the *only* symptoms. Intellect and consciousness were perfect. There was no paralysis, except such as had remained after the old attack. He could grasp firmly with the right hand, and could move the right leg at will during the intervals. He could also grasp (less firmly) with the left hand, and could move the left leg. There was no contraction of any of the muscles. General sensibility also seemed to be perfect. Then there were no special symptoms, as headache, vertigo, or tinnitus. There was no vomiting, nor had there been any. The pulse was now 120.

The questions that presented themselves here, related, first, to the diagnosis; secondly, to the treatment. With regard to the former, in most cases of cerebral or spinal affection, we have a number of symptoms, from the occurrence, absence, or relative position of which we are sometimes enabled to form a tolerably accurate diagnosis. But in this case we had nothing to guide us except these choreic symptoms. Now, the first question was this: Had we here a case of chorea, implicating only one side of the body? Chorea, though it chiefly affects young persons, will occur at any age. Dr. Graves records the case of a man aged 70, who was attacked with this disease; and Romberg, in his admirable work, gives an account of a woman 17 years of age, who was affected with chorea of the right side. This case certainly resembles, to some extent, the present. In opposition, however, to this conclusion, we had, first, the age of the patient, which was unfavourable to the notion of chorea, though it did not exclude it; next, the fact that he had had previous disease of the brain, as evidenced by the hemiplegia; then, though we called the movements choreic, they had not precisely the character of choreic movements, and, moreover, such extreme violence is unusual in chorea.

Putting aside, then, simple chorea as improbable, in what other direction were we to look for the cause of these movements? Was there any peripheral cause capable of exciting them? A hasty examination disclosed nothing of this kind. Then, supposing that there was an organic disease of the nervous centres, what was its probable seat? We were justified in excluding the meninges, because, when these are affected, the mind especially suffers in various ways. It was improbable also that the lesion was situated in the hemispherical ganglia, in the optic thalami, or in the corpora striata, because the symptoms of disease occurring in these situations are pretty accurately known, and no case is on record to my knowledge, in which either softening or hæmorrhage of these parts gave rise to symptoms of this kind unattended by other signs. The symptoms seemed to

point rather to the lower divisions of the nervous centres. From the fact that the muscles of the face seemed quite unaffected, it appeared probable that the disease was seated below the origin of the nerves supplying these parts. Admitting this to be the seat, what was likely to be the nature of the disease? This question was even more difficult to answer than the preceding one. Of the many diseases which may occur in the brain, there were two lesions which were most likely, viz., acute softening and hæmorrhage. Between the two it was not possible to decide, for in either case the same symptoms exactly might have been caused. To decide between them, we should have required the aid of other symptoms, and sometimes even when we have other symptoms, as paralysis, coma, contraction, etc., such decision is impossible. Of the two, the course of the disease seemed perhaps to point rather to hæmorrhage than to softening. The diagnosis, then, appeared at the moment in the highest degree obscure; but I felt inclined to think it was hæmorrhage into one side of the medulla.

But a still more important question related to the treatment. In all such cases we have to commence some treatment immediately. The diagnosis may be obscure, but, whether it be or not, something must be done at once for the relief of the patient; and in many cases of head disease, we have simply to treat symptoms. In this case we had no general rule at all to guide us. The case was unusual, and I confess that I knew nothing of it from previous experience. The man himself said, that if the movements continued he could not live; it was indeed evidently necessary to do something to control them; and, as there appeared no argument against its use in such cases, we determined to administer chloroform. The effect was very remarkable. Inhalation had not been continued above two minutes, when he fell asleep, the movements entirely ceased, respiration became easy, and the external jugulars, previously so distended, at once emptied themselves. Inspiration became more perfect, and expiration shorter. All over the front of the chest there were dry rhonchi, chiefly sonorous and droning, the presence of which we could not ascertain before on account of the movements. The pulse fell considerably, being now 108. The heart's impulse was strong; there were no murmurs. He remained asleep for about ten minutes, and then awoke suddenly. The *same moment* the movements recommenced with some violence, speedily increased in severity, and very shortly they were as intense as before. At the same time the difficulty in respiration returned, the obstruction to the pulmonary circulation, as evidenced by the condition of the jugulars, was again manifest, and the pulse increased in frequency. Accordingly the chloroform was repeated, and while he was under its influence, he was bled from the arm to 10 oz. During the bleeding the pulse fell to 92. Shortly afterwards, he awoke, and the movements on the instant recommenced. After waiting for about fifteen minutes, and finding no permanent improvement from these means, we gave him twenty-five minims of tincture of opium in a small quantity of water. He swallowed the draught without much difficulty. Ten minutes afterwards (at 8 p.m.) the respiration appeared extremely difficult, and at each expiration it was noticed that the lips were blown out, more however on the left side than on the right. This blowing out, if it meant anything at all, meant that the lips on the left side were more paralytic than on the other, but at a subsequent period this difference between the two sides had disappeared. The tongue was protruded well, and there was no deviation. The pulse was 120. He now inhaled chloroform for the third time, with the same effects as before, entire cessation of movements, the pulse falling to 88, respiration becoming easy. The pupils, which had previously been moderately expanded and moveable, were now very much contracted, and moved but little. The effects of the chloroform on this occasion lasted a quarter of an hour; he then awoke, the movements immediately recommenced, and the pupils suddenly became larger. At half-past 8, the movements being still extremely violent, chloroform was administered for the fourth time. It was noticed, that while under the influence of chloroform, the blowing out of the lips was equal on the two sides. The respirations were 20, the pulse 76. Having slept for about 40 minutes, he awoke, and the movements at once recurred with undiminished violence.

At a quarter to ten p.m. the dose of tinct. opii was repeated, and immediately afterwards chloroform was given for the fifth time. The same effects ensued as on each of the other occasions, the respiration became easy (22 per minute), the pulse sank to 88, and the movements entirely ceased. He now slept quietly for an hour, and on awaking at a quarter to 11, the movements immediately recommenced. Half an hour later, the movements continued violent; he passed some urine. Chloroform was now administered for the sixth time. Its effect, as before, was to induce a quiet sleep, which continued for an hour. At the expiration of that time, however, the movements recurred with their former severity, and continued till half-past 1 a.m., when he fell asleep spontaneously. This spontaneous sleep, *during which the cessation of the movements was as complete as when he was under the influence of chloroform*, lasted about an hour. He then awoke, and the movements recommenced. At half-past 3 he again slept spontaneously and quietly for half an hour, this sleep also being succeeded by a recurrence of the movements. From this time he continued awake, and in almost constant motion, till half-past 6, the movements, however, becoming gradually less violent. At half-past 6 he again slept for a few minutes, and as he lay asleep he appeared to be dying. The pulse was now 80—92, irregular, and more feeble than it had been. Respirations 18. When he awoke, the movements recommenced with the same characters as before, except that their violence had somewhat diminished. They were still confined apparently to the right side, or rather to the right extremities, the trunk, and neck, and the arm, as at first, was more affected than the leg. The man was still perfectly conscious. There was still no paralysis, no contraction, in fact no symptom except these movements, which, as the strength ebbed away, became less violent. He could grasp with both hands. The tongue was protruded without deviation. At a quarter to 8 he again fell asleep spontaneously, and slept quietly for three quarters of an hour. His respirations had now become very slow, numbering only thirteen per minute, and it was observed that expiration was three or four times the length of inspiration. On his awaking, the movements recurred (though now with considerably less violence), and continued till within a few minutes of his death, which took place at 9 a.m., on Monday, November 3rd, consciousness having been retained to the last. Cadaveric rigidity came on within half an hour after death, and was extremely well marked in all the limbs. The muscles of the calf were observed to be distinctly harder on the right than on the left side.

Briefly to recapitulate; we had here a case of choreic movements of the right arm, in a less degree of the right leg; movements of the muscles of the neck and of the trunk, —suspended by chloroform-stupor, and by natural sleep; unattended with delirium, coma, paralysis, contractions, or other symptoms connected with the head; and followed by death, caused apparently partly by exhaustion, and partly by asphyxia, forty-three hours after the first twitching of the foot, and seventeen hours after admission into the hospital.

At the *post-mortem* examination, the following lesions were discovered. First, Beneath the arachnoid, over the anterior part of the right hemisphere, a small quantity of blood had been effused, and was lying in three or four sulci, having penetrated deeply between the convolutions, but it had not apparently affected the cerebral substance. Secondly, There was softening, apparently old, of the upper and posterior part of the right corpus striatum and adjoining part of the optic thalamus. Before any section was made, the seat of this softening was detected by a depression upon the surface of the corpus striatum and a kind of transparency of the ventricular membrane at that part, with, at one point, a slight thickening of the membrane. The softening appeared to be old; it was of greyish-yellow colour, not red, moderate in degree; not at all like the acute red softening. Then, Thirdly, there was a slight amount of similar old softening of the left corpus striatum. Fourthly, There was hæmorrhage into the left crus cerebri, about half an inch in front of the pons varolii, and nearly in the centre of the crus. The quantity of blood effused was estimated at half a drachm. It was of quite recent effusion, was clotted, and had hollowed out for itself a space in the centre of the crus. The nervous substance around it was torn, but was not obviously softened.

There can be little doubt but that the disease which had caused the movements was the effusion of blood into the left crus cerebri; but it is very remarkable, that the muscles of

the face and tongue, and those of articulation, should have been so completely unaffected.

Then, in addition to these lesions, there was another, which was perhaps fundamental to the whole of them. All the arteries at the base of the brain were atheromatous, in a greater or less degree; and this condition extended into some of the very smallest calibre, being, however, most marked in the larger vessels. This atheroma was disposed in considerable amount, was distinctly covered by the lining membrane, and occupied the whole thickness of the middle coat. The outer coat could be stripped from it. It occurred sometimes in points, but more frequently in plates of various sizes, many of which involved the whole circumference of the vessel. It had a yellow colour, and, under the microscope, presented no very definite elements except cholesterine and fat. There were also various round or irregular bodies, rather larger than blood-discs, not distinctly cellular, slightly yellow, slightly opaque, the nature of which was doubtful. There was very little, if any, calcification of this atheroma, at least there was no effervescence with acetic acid. At the points where the atheroma was most marked, the calibre of the vessel was large; and where it involved the entire circumference, the size became very considerable. In the intervals, the artery was generally of its proper size.

Besides this disease of the arteries, there was another and a very interesting one. Several of the arteries in and about the circle of Willis were almost blocked up with firm yellow coagula, very uniform in appearance, and without the least tinge of redness. Some adhered firmly to the artery, and could not be detached without great difficulty; others were easily detached, and then formed long, round, firm yellow masses, which preserved their shape completely when removed from the vessel. That these clots were old, was evident from their colour, from their consistence, from the fact that they never filled completely the vessel, but left a narrow channel for the blood either in their centre or at the side, and particularly from the microscopic examination. On cutting through their centre, and examining scrapings from the most internal portion, there were, besides fat and other ill-defined elements, plates of cholesterine in considerable amount. Except these plates, I could see no crystals of any kind. The origin of these clots was, perhaps, the following:—Atheroma had occurred in these arteries, and the vessels, losing their elasticity, and dilating somewhat, had favoured the coagulation of the blood. This, at least, appeared to be one cause, for the clots were especially disposed where the atheroma was most marked. Then, in addition, perhaps the blood itself was in fault, and had a tendency to coagulation. That these lesions of the vessels were fundamental to the hæmorrhage,—that is to say, that an atheromatous vessel had ruptured, will be admitted; and it is probable, also, that they were connected with the previous softening. It is to be regretted, that we had not an opportunity of examining the arteries of the body generally. There can be little doubt that we should have found them in a condition resembling that of the arteries of the brain; but, unfortunately, the friends insisted on removing the body, and we were able to examine only the brain and heart.

In connexion with this condition of the vessels, it is very interesting to notice the state of the heart. The weight of the organ was 18½ oz.; and this excess was due almost exclusively to an enormous hypertrophy of the left ventricle, the cavity of which was slightly dilated. The thickness of the walls measured a full inch at the base, and about three quarters of an inch at the apex. This hypertrophy was not caused by any obstruction at the orifice, for the aortic as well as the other valves were perfectly healthy, indeed much more so than is usually seen in such cases. It is to be presumed that the hypertrophy was due to obstruction in the general circulation, and this may have been caused by a condition of arteries generally, like that we found in the brain.

Such, gentlemen, was this singular case, the exact counterpart of which is perhaps not to be found in the annals of medicine. On looking back upon our treatment of the case, with the results of the *post-mortem* examination before us, we may ask, Did we do all that was advisable to be done? Probably we did. In the absence of an accurate diagnosis we should hardly have been justified in more active treatment, and the chloroform, while productive of great immediate mitigation of suffering, had evidently no influence at all upon the necessary and inevitable termination of the disease.

CLINICAL LECTURE ON SURGERY,

AT

Guy's Hospital.

By BRANSBY B. COOPER, Esq., F.R.S.,

Senior Surgeon to, and Lecturer on Surgery at, Guy's Hospital.

I CONCLUDED my last lecture with a case of "stone in the bladder." I then brought under your notice the principal points of interest connected with this case; and, besides, I took the opportunity of recalling to your remembrance the steps of the operation of lithotomy which most of you had so lately seen practised upon this patient. I described to you that, after the operation, the patient was attacked by shivering,—a symptom not uncommon in these cases; and that when some coagulated blood had been expelled from the bladder he became tranquil, and was, I had hoped, going on very well. This, however, turned out to be a fallacious hope; the bleeding returned; about ʒiij of blood were evacuated from the penis; the skin became hot and dry; the pulse quick; countenance flushed; and, indeed, all the usual symptoms of constitutional irritation began to display themselves. The wound itself put on an unhealthy character; it was evident that the reciprocity of action between the nutrient and assimilative powers of the system was disturbed; that there did not exist that close relationship between the capability of the blood to nourish, and of the tissues to receive nourishment, which is essential to the reparation of the most trifling, as well as the most serious local or vital lesion. The wound looked puffy, the edges were protuberant; in the place of being covered with healthy pus, the granulations were glassy and exuberant, and, indeed, the wound presented what is so well expressed by the general term "an unhealthy appearance." It must be remembered, however, that the bleeding did not issue from the wound, but that the blood was discharged from the penis. As to the cause of these unexpectedly severe constitutional symptoms, I think it difficult to form a very accurate opinion; and it is the more remarkable that they should have occurred when the presence of the stone in the bladder had produced so little disturbance or distress during the time of its concretion. The stone was, however, of considerable size for so young a boy, and it is possible that, in exerting the force necessary to its removal, the surrounding parts may have been so far injured that ulceration or sloughing was induced, which would account for the subsequent constitutional effects. Under treatment, the patient, however, rallied. I gave him bark and mineral acids, and his tongue became clean, his skin moist and natural, and every symptom of fever was subdued. In the course of this last week his constitutional powers have so rapidly improved, that we may consider him in a state of perfect convalescence.

The first case which I shall take as the subject of to-day's lecture, is one headed

INFLAMED BURSA.

Edward Kelly, aged 17, a labourer, was admitted into the hospital Oct. 15, with a swelling on the anterior upper third of the forearm. The patient, who is a strumous-looking lad, was in the habit of drawing a truck. He stated, that six months before, while sparring with another lad, he received a severe blow on the arm, at the point where the swelling now exists. He had, however, had a small swelling in the same spot from his infancy; but it was not larger than a hazel-nut. The blow on the arm gave him considerable pain at the time, and at the moment his arm dropped useless at his side. In less than two months the swelling had increased to the size of a walnut. Soon after this he came to the hospital, and attended as an out-patient. The tumour was treated with iodine, and strapped up, but without producing any improvement in its condition. He has since been down in Kent gathering hops. During this time the swelling was neglected, and went on gradually increasing until it reached its present size. Ordered

Julep. ammon. c. pulv. rhei co. ter die; also a blister to be applied to the swelling. The blister rose very well, but the size of the swelling is not at all diminished.

Although this is headed a case of inflamed bursa, I must tell you, gentlemen, that the true nature of the swelling is not yet clearly made out; it is situated on the anterior part of the upper third of the forearm, and the situation of the swelling, as well as the likelihood of an inflamed bursa being produced in this spot in the course of an employment such as that followed by the patient, afford pre-

sumptive evidence of the tumour being of a ganglionic character. There exists naturally a bursa near the tubercle of the radius, just about the locality in which the tumor is situated in the present instance; under the influence of continued irritation, produced by pressure or any other cause, this bursa is liable to become inflamed; and in the act of drawing a truck, we can well imagine that the forearm may be subjected to exertion, often to violent jerks and a kind of torsion very likely to produce such an effect. In this case we must, however, keep before our minds, in relation to the diagnosis, the fact of the patient being apparently of a strumous diathesis; this would naturally lead us to inquire whether the swelling be not probably the result of a constitutional, rather than that of a mere local action; whether it be not, indeed, a strumous glandular enlargement. If the swelling had occurred in a region in which glands exist, such would be the first conclusion to which the surgeon would be led; but, in the case before us, the situation occupied by the tumour is not one in which glands are usually found. Below the elbow, between the radius and ulna, there is sometimes a small gland in the site of the superior interossial hiatus; and the swelling being in that region, it may be glandular; but if it be, I think it would have come to suppuration before now, although, at the same time, it must be admitted, that chronic glandular enlargements do sometimes exist for a long period, even for many years, without undergoing suppuration. Examination of this tumour does not throw much light upon the subject of its character; it is not lobulated and doughy like a steatoma; nor does it resemble fungoid disease. It may be asked, whether it is not an abscess. But there have been no symptoms of abscess; no shiverings; no constitutional disturbance. If it be abscess, it must be in its chronic form,—cold abscess, as it is termed. At all events, at the present time we have not made much progress in discovering what it is; first, it was thought to be abscess; then, upon examination, it was considered to resemble an inflamed bursa—to the touch it certainly seems most like chronic abscess; there are no nodules like those in steatoma; it is quite smooth, and the skin is not discoloured, and it is scarcely sufficiently circumscribed to be bursa. As you have heard, a blister was applied to the swelling, but it produced no effect whatever, and this circumstance leads me to doubt the disease being inflamed bursa. It very seldom happens that the application of blisters does not modify the appearance of inflamed bursa, even if it does not cure it. In this case the swelling remained completely unaffected. In some situations the diagnosis of bursa is very difficult; they may and often are, taken for exostoses; and I have published a case in which one on the inner part of the thigh was taken successively for an irreducible hernia, a steatoma, and an aneurism. By the use of blisters and pressure it was, however, completely cured in a short space of time. In the present case I have determined upon exploring the tumour. Under any circumstances, this cannot be productive of mischief. If the swelling should prove to be a steatoma, it must be removed by the knife; if it be chronic abscess, the matter will be let out; and if it be bursa, I shall lay the sac freely open; so that, as I have said, exploration can in any case produce no ill effect. One thing I must press upon your attention in operating upon bursæ. I believe it is always injudicious, not to say dangerous, to open them by mere puncture, or by any means which leave the character of the sac itself unaltered; there is great danger of exciting an inflammation in these synovial membranes, which may prove extremely difficult to check. Always lay open the sac freely, so as to destroy it as a secreting apparatus, and then there is little to be apprehended on the score of excessive inflammation. Now, gentlemen, you will perhaps think that this case is very unsatisfactory as it stands at present, but it is just one of those which deserve attention from the student; it shows that cases apparently trifling may be very puzzling, even to those who have had a long experience of these subjects; how cautious the young surgeon ought therefore to be in drawing conclusions when the premises are, as in the case I have just described, too obscure and insufficient to afford the necessary guidance to his judgment.(a) The next case is set down as one of

(a) Three days after these remarks were made, Mr. Cooper explored the swelling by careful dissection down to the tumour, which he laid open and evacuated an ounce of rather unhealthy pus, although it was perfectly inodorous. After this the wound granulated, and the patient has since left the hospital quite well.

ERYTHEMA NODOSUM.

Margaret Courcy, aged 60, admitted October 22, a widow, of healthy, florid complexion; temperate in her habits; by occupation a hawker. Up to the time at which she became subject to the present attack, her health has been very good; she has never suffered from rheumatism, nor has she before had anything similar to the disorder from which she is now suffering. The menses ceased about five years ago.

Some days since, after having been exposed for a considerable time to the cold in her daily occupation, walking at the time without shoes, she states that red spots appeared on the dorsum of her right foot; this did not occasion much pain, but on the following day red patches came out on the fore part of the leg also, and in this state she remained until admitted into the hospital. When she was examined, it was found, that on the anterior aspect of the leg there were several large oval patches, which were raised up above the level of the skin. The saphæna major vein in several parts was nodulated and hard; the pain was not very severe, and she describes it as being tingling rather than acute; her constitution does not seem much affected, although there is a slight degree of febrile action. Ordered, Oct. 23—

℞ Calomel, gr. iij.; pil. colocyn. co. gr. iv.; antim. tart. gr. ¼ statim.

℞ Magnes. sulph. ʒvj; liq. ammon. acet. ʒiss.; tinct. hyoscy. ʒiss.; aquæ menth. virid. ʒviss. Cap. cochl. ij. quaquâ quart. hor. donec alvus bene responderit.

℞ Pulv. Doveri gr. v. h. s. s. The limb to be fomented.

On October 27, the red colour of the prominent patches was fading, they were now bluish or slate colour, and were gradually diminishing in size. She did not complain of pain, and her appetite was very good. The mixture was discontinued after the second day of its use.

Nov. 4.—A small abscess had formed on the leg, which it was found necessary to open; all the other swellings having quite subsided.

Nov. 15.—The abscess had healed, and the patient had quite recovered.

This is termed a case of erythema nodosum; but, gentlemen, I do not feel quite sure that it is thus correctly described; in fact, I doubt whether it is a case of cutaneous disease. I am much more disposed to consider it one of inflammation of the absorbent vessels of the foot and leg. It is true, that the description of the appearance of the part agrees very well with that of erythema nodosum; but I must draw your attention to the fact, not mentioned in the account of the case, that the patient had injured her foot slightly, producing some degree of abrasion. This was followed by considerable swelling and pain in the foot and leg; and ultimately the red spots or blotches spoken of in the case made their appearance, and I have no doubt if the part had been examined at the time, we should have found red lines running from these red spots in the direction of the absorbents. The disorder appears, then, to have originated in local injury, not perhaps sufficient in itself to have produced any mischief, but, when subjected to the irritation inseparable from the exposure to cold and wet which happened in the daily employment of this patient, it became the germ of inflammation, which attacked the absorbents of the part, giving rise to the appearances already described. Now, it is likely, that if the inflammation had remained confined to the absorbents, some of the most striking of the local characters of the disorder would have been absent; but it seldom happens, I believe, that inflammation of the absorbents is present, without more or less involving the veins which accompany them, producing a greater or less degree of inflammation of the veins themselves; that is to say, phlebitis. When you consider how slight the constitutional disturbance was in this case, you may perhaps be surprised at my statement, that the absorbent inflammation was complicated with phlebitis,—an expression which seems to convey to the mind an idea of a very serious form of disease. In its early stage, phlebitis cannot, however, be regarded as a dangerous disorder; it is controlled by medicine without difficulty, and only becomes dangerous when it passes into a more advanced stage; but, if the venous inflammation be caused by the introduction of pus or virus into the blood, a secondary action generally commences about eight or ten days after the infliction of the injury. The symptoms are typhoid in their character; the patient is depressed in spirits, and prostrate in strength; restless and full of anxiety; feverish and irritable; often attacked by sickness and shiverings, and by low muttering delirium. It is often a fatal disease, and

death is generally preceded by extreme exhaustion, although the immediate cause of dissolution is in most cases effusion into the chest. Of course, in the case before us, the inflammation occurred in its milder form,—in what is termed, its adhesive form. Under these circumstances, the blood circulating in these vessels undergoes change; it coagulates more or less completely in certain points, impeding the circulation, and producing that nodular hardening in the course of the vessel which is very characteristic of the disease; but the inflammation is confined to the immediate locality in which it commences. The remedies administered to this patient were directed entirely under the view of the case I have just given; the object was to diminish constitutional irritation, to stimulate the natural action of the skin, and to promote the absorption of the depositions which had taken place in the veins of the part in which the disorder had appeared. The constitution of the patient was evidently not much involved in the complaint, although there existed some slight febrile disturbance; but it is evident that the constitutional powers were tolerably vigorous, as the abscess which formed in the leg, just as the original disease was cured, healed very rapidly, and without the least difficulty. The fact is, that, although this patient belonged to the humbler classes, and probably was obliged to content herself with a scanty and not too nutritious diet, there was in her manner of living one important element towards the preservation of health; her occupation of hawking goods about the streets kept her constantly in the open air. She had not to contend against those deleterious influences to which thousands of the poor, especially females, are subjected in this Metropolis. I mean the continued deprivation of fresh air and exercise,—influences prolific of disease in almost every form, and of the irresistible, although insidious power of which the community in general is now only beginning to have some comprehension. Instead of considering this as a case of erythema nodosum, I should then, gentlemen, regard it as one of absorbent inflammation, caused in the first instance by slight external injury exposed to irritating influences, the inflammation of the absorbents being accompanied by phlebitis in its mildest form. Under the use of the remedies mentioned in the case, the disease has completely given way, the normal relationship between the vessels and their fluids has been restored, and the patient is now quite well, and fit to leave the hospital.

ORIGINAL COMMUNICATIONS.

ON THE FINAL CAUSE OF MENSTRUATION.

By FRANCIS H. RAMSBOTHAM, M.D.

That the catamenial discharge which takes place periodically in the human female, is, in some way or other, intimately connected with the office of reproduction, seems proved to demonstration by the facts, that while, on the one hand, it does not show itself until the epoch of puberty has arrived, so, on the other, it ceases to be formed as soon as the system, from the advance of age, is incapacitated from performing the function of generation. And that its appearance is dependent upon the presence and healthy condition of the ovaries is equally evident; because, when they have not been developed, as in Mr. Pears' case, the menstrual discharge is never secreted, and when they have been removed, as in Mr. Pott's case, it ceases to be formed, which occurrence also happens when both these bodies are disorganized by diseased action.

Many theories, most of them vague and inconclusive, have been promulgated at different times to account for this phenomenon peculiar to woman; and the most prevalent doctrine of the present age is, that at each catamenial period one or more of the vesicles of De Graaf burst, and evacuate their contents into the cavity of the Fallopian tube, the ovule therein perishing for want of the life-imparting stimulus which should be impressed upon it by the male semen.

This is, indeed, little more than a modification and amplification of the opinion which Kerkring published in the "Philosophical Transactions" in the year 1672, in these words, "aliquando fœminæ dejiciunt hæc ova imprimis tempore menstruorum," and a revival of the notion which the late Dr. Power had imbibed, who seems to have entertained opinions on this subject very similar to my own; and who, indeed, characterized menstruation as "disappointed pregnancy."

The restoration of the idea in the present day is greatly owing to its having been demonstrated by Bischoff, Raciborsky, and others, (a) that in the mammiferous animals, at the time of heat, ovules pass into the Fallopian tube, although no intercourse with the male has taken place; and the theory is strengthened in a way that amounts almost to a positive confirmation by the researches of Dr. Letheby, who, in two instances, detected the ovule in the Fallopian tubes of girls that had died during the continuance of the menstruous action.

If it is really the case, of which there seems no reasonable doubt, that at each menstrual period in the human female the fimbriated extremity of one or both of the Fallopian tubes embraces an ovarium, and causes a Graafian vesicle to burst and shed its contents into the canal, it would naturally be inferred, that the formation of this fluid is subservient to the departure of the ovule from its ovarian bed, and designed to perform some important function in relation to its escape. Now, it would appear probable, that that function is identical with the nutrition of the young ovum, and that the menstrual discharge, indeed, is nothing less than the rudiments of the deciduous membrane itself; or, rather, that it would have become the deciduous membrane, provided conception had occurred. And I think the identity of these two products is established by the following considerations.

An ovule ripe for impregnation parts from the nest in which it had been elaborated, being conveyed by the grasp of the Fallopian fimbriæ. At the same time, Nature establishes an action for the purpose of preserving it, provided an opportunity of becoming impregnated by contact with the male semen is afforded it. Should that contact take place, and conception follow, the fluid formed is retained within the uterus, and is gradually converted into the deciduous membrane, which becomes the first medium of communication between the newly animated ovum and the maternal vessels. If, on the contrary, conception does not happen, the ovule perishes, and the fluid secreted for its advantage, not being required, is allowed to exude externally, as a superabundant and useless excretion.

This supposition, indeed, would require us to believe that the ovule may be impregnated, as well in the Fallopian tube, after its escape from the ovarium, as in the ovarian bed itself; and I can discover no difficulty in believing that such should be the case. In the genus aves, for example, the eggs are impregnated after they have escaped from the ovarium, and in that of pisces the same takes place, not only after they have parted from the ovarium, but even after they have been expelled from the body of the parent altogether; so also in some amphibia, as in frogs.

The variation in regard to the time that elapses between conception and the commencement of labour, observable not only in different women, but also in the same woman on different occasions, may, perhaps, be accounted for by the part of the Fallopian tube at which the ovule becomes impregnated: the nearer to the uterus the ovum was, the shorter the time probably that would elapse before it arrived at the uterine cavity; the nearer to the fimbriæ the longer would be the time, because it would have a larger portion of the Fallopian tube to traverse. The period of utero-gestation, properly so called, that is, the length of time the ovum remains within the uterine cavity, is, in my estimation, definite; while the

(a) See "Les Comptes Rendus," Juillet, 7, 1843, &c., &c.

time of transit through the tube varies considerably, after impregnation has been effected; and this variation will be sufficient to explain the difference above alluded to.

The view which I have taken of this question is strengthened by the facts, that the menstruous fluid and the decidual membrane seem both to be formed by the same tubular glands, lately discovered in the uterine substance,(b)—that the decidua, when first formed, is of the consistence of a viscid fluid,—that in dysmenorrhœa a membrane is not unfrequently formed within the virgin uterus, which has very much the external characters of the decidua, and, indeed, can sometimes scarcely be distinguished from that membrane, the result of impregnation,—that those females who menstruate irregularly or painfully are not so obnoxious to pregnancy as those in whom the function is normally performed,—that the catamenia will sometimes appear once soon after impregnation, as though more fluid had been afforded than was required for the purposes intended,—and especially that, as in the lower animal, no deciduous membrane is formed, therefore there is no necessity for any menstrual secretion; and we know that woman is the only animal subject to this peculiarity.

The position then deducible from the foregoing observations is, not only that whenever impregnation occurs a secretion is elaborated by the uterus for the purpose of affording nourishment to the ovum, but that, independently of conception taking place, an ovule, even in the virgin, passes periodically from the ovarium into the Fallopian tube, and at the same time the same provision is made by nature for its preservation, in anticipation of its becoming vivified; but that if this vivification is not effected, the fluid formed flows away, is cast off, indeed, as effete matter, and is what we popularly call the menstruous discharge.

The periodical return of the discharge cannot be considered as militating against this theory, but rather as supporting it; not only because we have constantly before our eyes instances of functions in the body performed with periodical exactness, but also because we know that in those of our graminivora which bring forth but once annually, the season of conception is so determined that the young should be produced in the spring.(c) Thus the mare and the ass, whose period of gestation is eleven calendar months, conceive almost immediately after parturition,—the mare on the ninth day after, the ass on the seventh,—to the evident intent, that a new progeny may be reared in the summer months. The cow, whose period is nine months, does not, however, conceive till three months after her last birth. The sheep and goat, which carry their young five months, will not take the male till the end of autumn; and the hare, whose term is only thirty days, does not become impregnated until eleven months have passed since the last parturition. This extreme variation in these different races of animals is evidently instituted with one single object, namely, that the young may be produced into the world at that season of the year most favourable for their nurture. And if Nature has been so precise in regard to the lower animals, we cannot wonder that she has displayed an adherence to a similar system in the case of the females of our own species, or that there should exist in the human subject the same kind of periodicity in regard to the perfection and escape of the ovule from the ovarium.

Nor can the waste which such a frequent loss of the ovule must entail on nature, be regarded as an objection, since we see, as well in the animal as in the vegetable kingdom, loss to an enormous amount, exactly of the same description, constantly going on. How few seeds comparatively, even after fecundation, become productive, and what a wholesale destruction of organic life is there not witnessed in the case of fishes. Of the million or the million and a half of ova expelled from the ovarium of the sturgeon, for instance, how few are fecundated, and how few of those that are fecundated survive to be elevated into the existence of a living independent animal. If nature permits such a waste to be inflicted on her, in the reproduction of one genus of animals, we cannot surely find difficulty in believing that the same prodigality (so to speak) may in a minor degree influence her operations in the human subject.

14, New Broad-street, and 7, Portman-square.

(b) Quain and Sharpey's Anat., Vol. II., p. 1266. Muller's Physiol., p. 1574. Coste, Hist. Gén. et Part. du Dev. des Corps Organ., p. 208.
(c) See Robertson's "Physiology of Women," p. 186.

SOME DIFFICULTIES OCCURRING IN A CASE OF LITHOTOMY;

WITH OBSERVATIONS.

By RICHARD QUAIN, Esq., F.R.S.

Inasmuch as lithotomy may, I think, at present be said to be pretty firmly based on a small number of fixed principles, and a great degree of simplicity and completeness has gradually been introduced into the steps of that operation, so far as all ordinary cases are concerned, it is only the examples of unusual circumstances, presenting difficulties, and the means by which these are to be met, that now seem to me to require much of the notice of surgeons. As an illustration of some such circumstances, a case which occurred to me very lately may be worthy of being recorded. The following history is abridged from the report in the Hospital Case-book, by Mr. Hillier, one of my dressers:—

Giles P., aged 67, a farm-labourer, temperate in his habits, was admitted December 10, into University College Hospital. Seven years ago, having been previously in good health, he found, when passing his urine, that the stream suddenly stopped, and others of the usual symptoms of stone in the bladder then manifested themselves. Since that period he has been a constant sufferer, and quite disabled from working, on account of intense pain excited in the glans penis, throughout the urethra, and in the hypogastrium, by his moving about. At times he has had pain in the loins also, and at times his urine has let fall a sediment which he likens to "corruption stuff." But the urine has lately been clear. Upon his admission:—He feels pain upon pressure being made over the bladder; he passes water more than once an hour; sleeps but little; pulse intermits every third beat; tongue is somewhat furred. He appears worn and weak. A stone was detected by the passage of a sound. Urine, acid; sp. gr. 1016; contains albumen, but not in large quantity. To be kept in bed; to take morphia at night, and, at intervals during the day, a mixture containing carbonate of potash in camphor julep, with occasionally a small dose of castor oil.

Progressively there arose a clear improvement in the condition of the patient. The tongue became cleaner, and the evacuations of urine were much less frequent; but the improvement was not uninterrupted. The digestive apparatus after a while became disturbed; the tongue was loaded, abdomen distended with flatus, and the urine was again voided with much frequency. From this state he gradually improved; and, although his health was not in a very satisfactory state, yet, as he became urgent for the operation, and there seemed little likelihood, he having been now a month in hospital, that further improvement would take place in his general health, it was thought on the whole best not to wait longer.

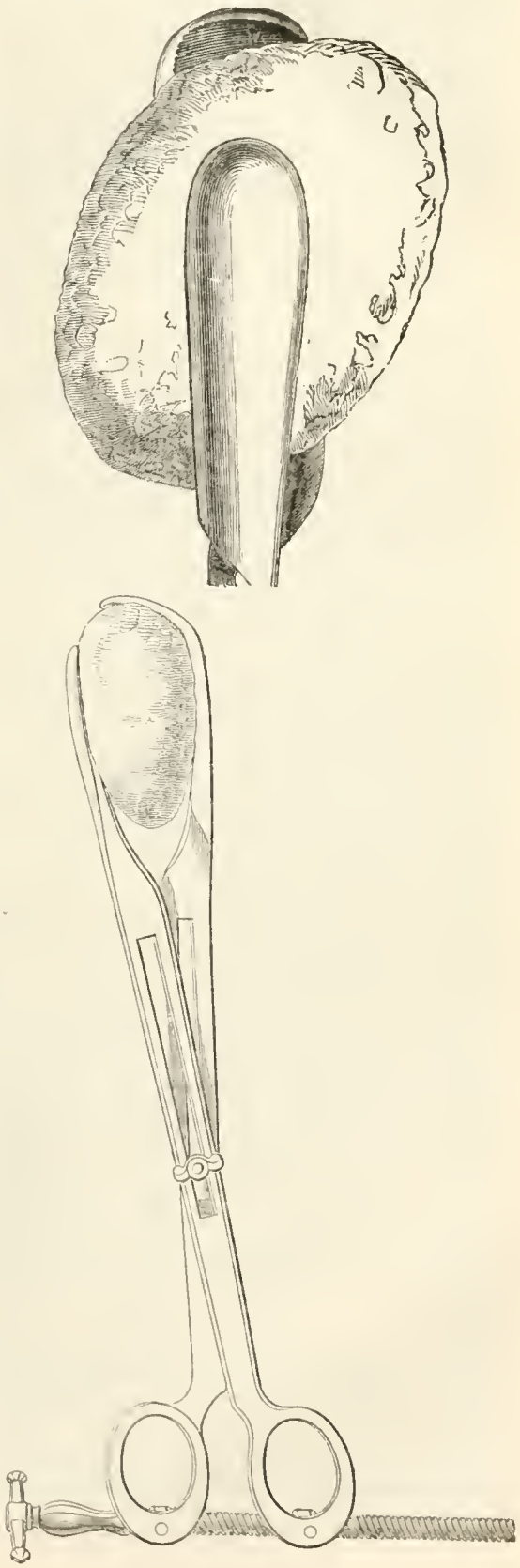
January 8.—The patient being brought under the influence of chloroform, and placed in the usual position, the integuments were freely divided; and then, after two short incisions, the knife was lodged in the groove of the staff, and passed onwards to the bladder. The staff, a large curved one, such as Sir C. Bell, in the early part of his career, and Mr. Liston continually used, was held at first so as to be somewhat prominent towards the perinæum, and when the knife reached it, the position of the staff was altered so as to bring up its end from the perinæum and rectum. So far everything was in the usual course, and easy. The prostate was found to be enlarged, and it was not till after the forceps had been passed and its blades opened, that a gush of urine took place. The stone was at one side, behind the enlarged prostate, but it was with some management brought towards the middle and seized. When the forceps was drawn forwards, the prostate was pressed, as it were, into the way of the stone. Hereupon the gland was divided with a probe-

pointed bistoury on the right side, and more fully on the left side too. But this expedient was ineffectual for the purpose. The forceps, it was found, could not be made to reach so far upon the stone as to give much power by its hold, and a good deal of power was requisite to draw the large stone through an enlarged and indurated prostate. The instrument slipped repeatedly; but that there was no want of force in grasping the handles with a view to prevent the slipping of the blades may be inferred from the fact, that the ends of these were straightened against the stone. Larger forceps were tried, but ineffectually; and the failure is, I believe, to be accounted for by the stone being too long to be taken fully within the grasp of the instrument, and too flat, as well as too hard, to be held with the blades merely resting against it, *i. e.*, by these circumstances added to the resistance of the prostate. In short, after several trials and much exertion to keep the forceps from slipping from the surface of the calculus, or to break it by pressure, I was unable to effect the last step of the operation. I may observe here, that while the stone was being brought forward, a small piece of one of those growths from the back part of the prostate, so common in aged persons, was loosened, and I removed it with my finger. The operation might have been completed speedily with a larger division of the deep structures; but this course I consider wholly inadmissible, for urine would thereby be allowed to infiltrate the cellular membrane of the pelvis, and the death of the patient would have been the almost inevitable result. The only resource was, therefore, to break the stone into fragments, or to draw it forward by dilatation of the gland and neck of the bladder, for I put out of the question the laying open the bladder into the rectum, or any other additional operation for the removal of a large stone. But I was under the necessity of delaying till I should be provided with the means of overcoming the difficulty. At this time, too, I was informed by Mr. Clover, who administered chloroform, that the patient was becoming weak. Removed to bed, he speedily recovered. In the evening, he was to all appearance, and to his own feeling, quite as well as in the morning. He was now again submitted to the action of the anæsthetic agent; and, while he still lay in his bed, I applied the instrument represented in the accompanying figure, and by means of it the stone was removed. It was not directly broken by the force of the screw, but it fell into two parts when this was loosened.

On the morning after the operation, the patient was in a favourable state. He called for tea and toast for breakfast. During the after part of the day he vomited, and vomiting occurred repeatedly on the second day till evening, when it ceased, after the bowels had acted under the influence of an enema and he had taken a pill of opium.

Jan. 12.—4th day.—He slept well and calmly during the last two nights. Suffers at times pain in abdomen; but this is relieved by the passage of flatus, which he has long been very subject to. He lies on his side usually. The countenance is natural; abdomen not tumid. He takes liquid food in small quantities, and at short intervals. There is nothing unhealthy in the condition of the wound. The urine escapes freely, and it is quite clear. This has been the case since the first morning after the operation.

There were, it will be inferred from the foregoing statement, two sources of difficulty in the case, namely, the enlargement of the prostate, and the large size of the stone. The large size of the latter, it is well known, is also a serious addition to the danger of an operation. The influence of increased size of the gland, which does not add to the danger as it does to the difficulty of the operation, may be illustrated by reference to an instance that occurred in the practice of Mr. Liston in the same hospital, and I will refer to it in the words of the late Mr. Samuel Cooper, who witnessed the operation. The operation was, says Mr. Cooper in the "Dictionary," "excessively long, and a portion of the enlarged gland which had been sliced off fell down upon the floor." This, it is to be remembered, is the language of a looker-on, who, as is apparent from the remainder of the passage quoted from, was practically unacquainted with the difficulty of such a case. As regards the portion of the prostate alluded to, it was removed, I believe, for I was present at the time, by the pressure of the stone upon the gland after this had been notched twice at one side to give increased room. The stone was not in this instance a large one. But the passage is cited here to show the difficulty the enlarged gland creates in the operation with even so dexterous an operator as Mr. Liston is well known to have been.



As regards the instrument with which the stone was removed, a few words of explanation are necessary. The blades were passed separately, the bent one first. The arrival of this behind the calculus was well marked by the jerk which occurred when its point left the side of the foreign body. It is a useful part of the construction of the instrument, that the pivot which serves as a hinge may be fixed at various distances from the end of the blade. The action of the screw on the handles would, I have little doubt, be sufficient to break most calculi. As a forceps, in addition to other obvious advantages, it occupies less space in the wound than any ordinary one that could be applied with effect to remove a large calculus. For the instrument I am indebted to Mr. Weiss.

THE WEEPING LEG (ECZEMA RUBRUM.)

By JOHN ADAMS, Esq.,

Surgeon to the London Hospital.

There are many circumstances peculiar to the lower extremities of the human subject which render this part of the body liable to diseases from which the upper extremities are altogether exempt, while this part of the body is necessarily equally liable to the ordinary diseases affecting the upper extremity. The peculiar circumstances to which I now allude are referrible entirely to position. In the lower animals the position of the pelvic extremities, being subject nearly to the same conditions as the thoracic limbs, diseases appear to be, with few exceptions, common to both. It is true, that even in the lower animals, as the horse, there are certain diseases which are peculiar to each; yet for the most part they are common to both. Ulceration of the cartilages of the joints of the terminal parts of the extremities more frequently attacks the fore-foot, whilst the grease is infinitely more common in the heel of the horse.

The human subject, destined to stand and walk erect, enjoys this distinguished privilege at the expense occasionally of much comfort; for the conditions necessary to this enjoyment are attended with peculiarities of structure, and arrangement of parts, which, in weak states of the general constitution, predispose to serious organic mischief.

The two principal modifying conditions to which I now allude are referrible to the state of the circulation, namely, the ascent of the blood towards the heart contrary to gravity, and the remoteness of parts of the limb from the heart, the centre of the circulation. Hence arise a multitude of troublesome, if not serious affections, requiring much skill and nicety of treatment to cure, or at any rate to rectify. Not to dwell upon diseases incidental to the articulations, especially the knee and hip-joints, which are unquestionably peculiarly obnoxious to inflammation and all its consequences, and which diseases may be in part dependent on the position and state of the circulation of the limbs, I would beg more particularly to dwell on those disorders which are clearly attributable to derangement in the function of the vascular system of the lower extremities.

It is not my intention, however, to enter upon the consideration of varicose veins and ulcers, and the treatment necessary for their relief; this subject is so well understood now, that it may be deemed a work of supererogation to do more than allude to it: my object is to direct attention to a disease of a very troublesome character, and one attended occasionally with very serious consequences; namely, eczema rubrum of the inferior extremity, or the weeping leg.

Eczema rubrum is not peculiar to the lower extremities; it may arise in any part of the body, but it very frequently attacks the lower limbs, and usually selects the left in preference to the right. Of course the term "weeping leg" is only applicable to the disease when the inferior extremity is the seat of the affection. The circulation in the veins is frequently much retarded in the left lower extremity, in consequence of the impediment offered to the free return of blood by the pressure exerted on the left iliac vein, by the crossing of the right iliac artery; this arrangement predisposes to varix and its usual concomitant circumstances.

The disease in question commences by a small spot of redness in the skin, accompanied with a slight itching; this is soon succeeded by a branny scaling on the surface, arising from the drying of a small quantity of serous exudation. The disease attacks many points of the surface at once, and gradually extends itself from each centre of inflammation to the circumference, until the adjacent patches of inflammation coalesce, and form one large inflamed surface. More frequently the inner side of the leg is first attacked, the disease taking the course of the radicles of the vena saphæna major. Sometimes, however, its principal seat is on the outside of the limb, in the course of the lesser saphæna vein. The disease extends upwards and downwards; upwards as high as the knee, downwards so as to involve nearly the whole surface of the foot, and frequently it extends as far as the dorsal surface of the toes. It is by no means uncommon to find it limited to a large patch on the dorsal surface of the foot, and I have repeatedly seen it confined to the sole of the foot, where it undergoes considerable modification from the peculiarity of its position. Although the disease is frequently limited to the leg, it occasionally passes up the thigh, and produces small irregular patches, and the inflammation becomes gradually less intense as it proceeds upwards.

The inflamed surface at first presents a simple red appearance, but this gradually assumes a brilliant scarlet hue, gradually shaded off to a dusky red; from every tangible point there sweats out a small quantity of a transparent fluid, which is frequently seen to collect in drops on the surface, but it often happens that this cannot be distinguished, and the whole surface of the inflamed part is moistened by so large a quantity of fluid as to keep the bed clothes perfectly wet, the exudation coming from the universal surface of the inflamed part. The secretion, as the disease advances in intensity, alters its character, and inasmuch as at first it often dries here and there into large transparant scales, it now becomes more opaque and milky, and drys into large semi-transparent or yellow scabs. This alteration in the secretion arises from the larger admixture of albumen with the serous exudation, and the yellow scabbing is often more apparent at the edges of the toes than in any other part, where it appears to accumulate in ridges on either side of the toes. When the scales or scabs are raised, the skin beneath is found reddened like raw beef, and the delicate papillary surface of the cutis is visible, the papillæ being raised and hypertrophied; the spaces between the scales being often dry and delicately polished.

This description applies, for the most part, to the disease in general, (which assumes the name of impetiginous eczema when there is anything like puriform secretion drying into opaque scabs,) and may be said to be limited in situation to the papillary surface of the cutis and its epidermic covering. But when it attacks the limbs it is much modified, and will be found to involve deeper structures: thus the cutis becomes remarkably increased in thickness, presents, in many situations, a dense brawny appearance, and, losing its natural elasticity, is thrown into transverse, unyielding folds. This is more especially remarkable about the ankle, below which it assumes its greatest extent of thickening, and it will be found here to have become hypertrophied to such an extent as to interfere with the natural movements of the ankle-joint. The outer side of the foot is also affected to the same extent, and the sole of the foot undergoes a similar change. The cuticular covering in the skin is also much increased in thickness; indeed the hypertrophy of this part is so great that a thick, horny layer is formed over the surface, and this frequently, becoming moistened by the serous exudation from the cutis, splits up into fibres and filaments, like that condition of cuticle characteristic of the "porcupine skin."

In the advanced stages of the disease, or, rather, where the disease has continued long in the lower limbs, the inflammation attacks the subjacent cellular membrane, and produces œdema of the part to a considerable extent; nay, in the very worst forms of the affection, the ligaments of the ankle-joint become chronically inflamed, and, the bones themselves becoming affected by a low species of inflammation, it may be fairly said that the whole tissues of the limb are involved, as the muscular system can scarcely escape. A limb, under the circumstances just detailed, presents very much the same appearance as is seen in genuine elephantiasis.

I assume that this disease begins in the cutis, commencing in the papillary surface of that structure; that it gradually extends itself deeper and deeper, and eventually involves all the subjacent structures. Further, I assume, that when confined to the lower extremities, it is almost invariably accompanied by a varicose state of the veins; and, further, that this latter condition is frequently the cause of the disease. I have little doubt, also, that the disease is capable of spreading itself by a species of infection, the secretion of one part oozing over the adjacent skin inducing a similar condition in the parts around, although I do not think that this is the invariable cause of its extension. It attacks both male and female indiscriminately, but is much more severe in the latter, and more difficult to cure, in consequence of the greater delicacy of the skin, and the difficulty of getting the skin to bear those applications which are necessary to its cure. It attacks persons of all ages, but is more intractable in the old person; and, from circumstances presently to be mentioned, it is a much more serious disease in the old than in the young.

The secondary consequences of this affection consist in the formation of ulcers, which assume an acute or chronic form according to the state of the general inflammation of the leg. The general health is affected more or less; in the acute form, fever is sometimes present, but commonly there is merely a slight disturbance of the general health, evinced by a loss of appetite, confined bowels, and furred tongue. Sometimes the pain is excessive, giving rise to a sense of burning over the whole extremity, and the patient can scarcely bear the weight of the bed-clothes, and at night the uneasiness becomes intolerable. In the milder forms, there are simple itching and slight burning.

In old chronic cases of eczema, the nature of the secretion becomes much modified. From being of a serous or seropurulent character, it becomes distinctly scaly, and in very many instances the disease can scarcely be distinguished from icthyosis. The history of the case will determine its nature. So also during the progress of cure the secretion becomes scaly; the scales are evidently the result of concrete epidermic cells.

Treatment.—Of the curability of this disease there can be no doubt; but, as the sequel will show, I entertain a very serious doubt of the propriety of curing it,—at least in many cases. In the treatment of this affection there are two important local indications; first, to relieve the subjacent veins, so commonly varicose; and, secondly, to soothe the delicate inflamed cutis, and alter the action of its vessels; nor ought we to forget the necessity of a due attention to the general health; but of this I shall treat afterwards.

In the acute form of the disease, absolute rest in the horizontal position, with the leg slightly raised above the level of the body, fulfils the first indication. In milder cases, the same result may be obtained by careful bandaging; but this unfortunately, in many instances, cannot be borne, and therefore rest must be enjoined. The surface of the cutis is so tender in females of delicate skin, that pressure, or even moderate support, gives rise to great pain, and cannot be tolerated. I have seen a vast variety of local applications employed (they may be classed under two general heads of ointments and lotions), and I have no hesitation in giving a decided preference to the latter. It happens, however, that in many of the milder cases of this disease, we are enabled to combine medicated local applications and mechanical support together. This can be accomplished by careful strapping with emplastrum plumbi spread on thin unglazed calico. This, however, in many cases cannot be borne, owing to the irritation excited, apparently by the confinement of the perspiration. In other cases, where the disease is limited in extent, as it sometimes is, to the dorsum of the foot and toes, the emplastrum plumbi, spread thickly on leather, and carefully bandaged to the part, will, if allowed to remain on four or five days, effect a cure immediately. It is an application of a most soothing character, and gives at once immense comfort to the patient. In the acute forms, neither of these applications being tolerable, I would discard all greasy ointments, and confine myself strictly to cold lotions. I have frequently seen such applications as the black wash, and a solution of nitrate of silver of varied strength, employed with some benefit; so also, I have witnessed the use of opiate solutions to the part without any use at all beyond a momentary relief from pain; but what I feel justified in pronouncing almost a specific for this complaint, is the careful employment of the oxide of zinc lotion in the proportion of two drachms to a pint. The oxide of zinc should be used quite pure, as it is often adulterated with the carbonate of lead. Great attention must be paid to the mode of applying it; thus, every incrustation must be carefully removed from the skin beneath with a spatula, and lint soaked in the lotion well shaken up, must be carefully laid on night and morning, and over the whole a light bandage should be used, (sometimes, after the removal of the scabs or scales, a light brush with the solid nitrate of silver is of great service;) if the lint dries soon, and becomes a source of irritation, a piece of oiled silk may be laid over it prior to the application of the bandage. By these means, sedulously employed by the surgeon himself, the most inveterate and acute forms of the disease may be speedily cured; the ulcers will gradually heal, and the skin, after a time, having resumed its natural suppleness, the comfort of the patient will be complete.

During the local treatment, a saline purgative, as the sulphate of magnesia, or the acetate of potash, should be administered with small doses of blue pill and compound squill pill; the diet should be moderate, wine, beer, and spirits being interdicted, except in occasional exceptional cases, as in old persons, or patients of debilitated constitutions.

There is one point of serious importance to which I wish to direct particular attention: I mean, the propriety of curing this disease where it has existed for any length of time. It has happened to me, in more than one instance, that patients, especially those of plethoric habit, have complained during the progress of cure, of slight dyspnœa, with occasional giddiness and other signs of disturbed circulation, and this has been frequently accompanied with a scanty secretion of urine, and confined bowels. I have been led to infer from this, that there is either a tendency to effusion into the chest, or threatening apoplexy, and I have, therefore, been especially sedulous in the use of those means which act on the kidneys and bowels; and, with strict directions as to diet, I have warded off this threatened invasion. If these circumstances are not attended to, as I have known in some few instances, we may expect that in old persons either of the unfortunate contingencies alluded to will occur.

I attended a gentleman between 60 and 70 years of age some few years back with eczema rubrum of the lower limbs, and, after a short time, by the use of the means already mentioned, he got quite well. In a few weeks, during my absence from home, he had an attack of apoplexy, which soon ended his existence. A medical man in extensive general practice mentioned to me a case which had just occurred to himself, of an old patient whom he had, after a considerable time, just succeeded in curing of a similar affection; he died suddenly apoplectic. Many other cases have been reported to me, where a similar result succeeded the cure of a weeping leg. I lately attended a lady who had been the subject of this affection in the left leg for four years; she was about 40 years of age, very fat, and had just ceased to menstruate. The moment her leg began to mend, she began to suffer giddiness in the head, dyspnœa, and a sense of great fulness about the præcordia; her water was also scanty in quantity and high coloured. By the use of blue pill and compound squill pill, in two and a half grain doses each, at night, followed by a dose of Epsom salts in the morning, with a few drops of liq. potassæ twice daily, her urine increased in quantity, and, *pari passu*, her other symptoms subsided. I thought it prudent in her case to apply a blister behind her ear, and to keep it discharging for a fortnight. By these means the attack was prevented, and she now remains permanently well. I could enumerate many such cases.

When the disease attacks infants, in whom it assumes a more chronic form, and is seldom confined to the lower limbs, head symptoms frequently succeed the arrest of the serous secretion which attends this affection; I have known fatal epilepsy the result. Such cases must have occurred frequently to practitioners whose experience is extensive in the treatment of infantile diseases. After the cure of the disease of the skin, there is the consequent thickening of subjacent structures to be combatted,—careful bandaging, and a persistence in the modified use of the general means, will effect a permanent cure; but there will remain for a long time a tendency to recurrence of the disease, evinced by a constant formation of an excess of cuticular secretion: this must be prevented by a persistence in the remedies already alluded to.

ON THE EMPLOYMENT OF MERCURY IN ORDINARY CASES OF SYPHILIS.

By G. BORLASE CHILDS, Esq., F.R.C.S.,
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So much has been said and written upon this subject, that it becomes now a matter of difficulty to suggest anything of a novel character which may be received by the Profession as of practical utility. The following brief observations may not be deemed unacceptable, embodying as they do the writer's views of this question, apart from and unbiassed by the prejudices and opinions of others. From the nature of his appointment it must necessarily follow that a wide and ample field of observation has been open to him, and it would be but fair to infer that he has availed himself of this opportunity to arrive at some definite conclusions respecting this important question.

The question necessarily resolves itself into three heads.

First, as to the character of sores for which mercury should be given.

Second, as to the influence which mercury exercises over such sores.

Third, as to the power of mercury in preventing constitutional syphilis.

In reference to the first question, I cannot agree in the opinion advanced by some surgeons, that mercury should be exhibited indiscriminately in all sores, at whatever stage they may be presented to us,—such a course of treatment would in many cases be productive of the most serious results; nor, on the other hand, am I inclined to adopt the opinion expressed by an opposite party, that mercury should on no account be given unless we have some very decided proof afforded us, either by the peculiar appearance of the sore, or by the testimony of the patient himself, that it has a venereal origin.

During the ulcerative stage of an ordinary chancre, I believe there are few practitioners who would place their patients under the influence of mercury; such a practice would be fraught with danger, and, to say the least of it, the progress of the case would be slow, and much more protracted than it ought to be,—circumstances both embarrassing to the surgeon and unsatisfactory to the patient. If, therefore, an opportunity occurs of seeing the patient during the earlier stage of chancre, the right course will be to destroy the pustule by a liberal use of the nitrate of silver, or, what is far better, with a finely-pointed stick of caustic potash; less irritation will be found to follow the latter application than the former; the sore should then be treated with simple dressing, or with a weak solution of chloride of soda and opium, over which a layer of finely-carded cotton should be placed, in order to obviate the possibility of friction. This treatment should be pursued until the regenerative process commences, when mercury may be resorted to with marked benefit. These sores are not unfrequently contracted at a time when persons, having drunk more freely than prudence suggests, a sort of artificial incentive is acquired for sexual indulgence. With these persons the system is in an irritable, inflammatory state, and the sores so contracted necessarily assume an irritable, inflammatory type. Under such a state of things it would not only be unwise, but dangerous, to place a patient under a course of mercury,—we must wait until the system has been cooled and quieted by mild aperients and opiates, the sore freely cauterised, and subsequently dressed with the solution referred to. It will sometimes be necessary even to abstract blood from the sore itself by the application of a leech, care being taken that an additional chancre is not created from the leech-bite itself.

In spite of all our efforts, from the onset some sores pertinaciously resist every attempt made to heal them, and evince a disposition to rapid ulceration and sloughing, to which we apply the term phagedæna. Some of these are of a superficial, others of a deeper character; many are amenable to the influence of mercury, but there are others, again, in which this remedy totally fails, and in the treatment of which large doses of iron and opium can alone be depended upon. It is but rarely that the surgeon is enabled, at first sight, from the appearances of such sores, to form a correct judgment of the plan of treatment he ought to adopt, whether mercurial or otherwise; but, granting that the sore had a venereal origin, and that the patient had not been previously submitted to a mercurial course, with certain restrictions, he would not err in adopting it. In short, as a general principle, mild doses of mercury, in the form of blue pill and Dover's powder, may safely be tried in all ordinary cases of venereal chancre, without any ill result.

With regard to the second question, viz., the influence of mercury over venereal sores, there can be little doubt but that a great many of these sores heal without the aid of mercury, and there can be still less doubt but that a modified mercurial treatment greatly facilitates the healing process, and materially diminishes the chances of secondary symptoms. Were I asked, therefore, to define the character of sore in which the simple treatment should on no account be risked, I should say, in a few words, all sores that a have a tendency to induration and an indisposition to heal. And here I may also remark, that if we are disposed to be exclusive in the use of this remedy, we must learn to distinguish those sores which derive their induration from simple irritation, and those which acquire it from the application of a specific virus, as all the characteristic appearances of a true Hunterian chancre are not unfrequently simulated in a similar sore by a too liberal use of lunar caustic and other irritating applications.

And now as to the third question,—the power of mercury in preventing constitutional syphilis,—a question of grave importance to the patient, and one of undoubted interest to the surgeon,—a question which, I am free to confess, has not been satisfactorily responded to in my own mind, either by my own personal experience or by the collated opinions of others;—to place implicit confidence in the anti-syphilitic powers of mercury, or, during the treatment of primary chancre, to guarantee a patient's safety in this respect, would be but a bold and adventurous speculation, and one unbecoming a follower of legitimate practice. Certainly much can be done to lessen the chances of such a result, by judicious management in the early stage of chancre, such as free cauterization, rest, and a proper prophylactic treatment. It has been asserted by a celebrated writer on this disease, that all persons are not susceptible of a general infection. In this opinion I concur, and it must have been observed by those who have had much experience in this department of practice, that persons who, from neglect or otherwise, have not touched a grain of mercury, yet with a sore possessing all the characteristics of a true Hunterian chancre, are never attacked by consecutive affections; while, on the other hand, those who from the commencement have been submitted to a mercurial course, have suffered most severely from them. In such an uncertain state of things, the wisest course is to avoid extremes by steadily administering moderate doses of blue pill, combined with Dover's powder, until the sore has healed, and no induration remains. By this plan, although we cannot offer our patient a sure guarantee against constitutional infection, yet there is one thing at least we shall have the satisfaction of knowing, that should consecutive affections appear, in the majority of cases they will be so modified and mild in their character, that little or no uneasiness need be felt respecting the results.

THE UNITY OF THE LAWS WHICH GOVERN THE EXCITING AGENTS OF EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.

By JOHN GROVE, M.R.C.S.

(Continued from last Volume, page 642.)

The law of static existence which is exemplified in the seed of plants and in the ova of animals, is remarkably illustrative of the doctrine here set forth.

The equilibrium of force which obtains in the seed or the ovum, is that relation of the component atoms of organic matter by which they are sustained in a condition requiring only a determinate train of circumstances to develope a series of phenomena. This series of phenomena, viz., growth, maturity, and decline, wherever they are found, indicates as a sequel, the tendency and design of a multiple repetition of similar series. The seed is sown, and the ovum impregnated, the equilibrium of force is disturbed, the period of static existence has terminated, the formative power is at work, the death of the old and the generation of the new is

the sum of the result. It is in this generation of the new, that the condition of static existence again appears in the newly created germ. All this is manifest in the inoculation of small-pox, or in the communication of any disease by contact. But beyond this, the period of static existence, whether of the seeds of plants, the ova of animals, or the germs of disease, has certain limits, and is regulated by a law. Further, in a given time, all alike yield to the dominion of the physical forces, chemical affinity, heat, light, and electricity. It is but in our day that well concerted experiments are being made to determine the duration of the latent life of seeds, and, fortunately for the botanist, his experiments can be conducted without risk or injury to any person. With a fair amount of caution and precision he may calculate upon arriving at a considerable amount of valuable information in a course of years; but the pathologist is less fortunately circumstanced; the experiment of sowing the seeds of disease among the human species would be unjustifiable (except in the case of cow-pox) and it would be highly interesting to know how long, under favouring circumstances, this virus might retain its power; this, with some other matter of disease laid by for experiment, after the manner of the botanist's seeds, would not be altogether without its fruits. Without reference, however, to experiment, we are all satisfied that the matters of disease have a power of resistance to change or decomposition, and that the period during which they can retain this power, though not at all defined, is nevertheless known to extend over a space of some years in a few instances, perhaps only over a few months or weeks in others.

It is sufficient here to point out the fact that the elementary matters of disease possess a static power of resistance to change, and that, while that power remains, they are capable, like the seeds of plants, under favouring circumstances, of taking on an active state of existence, viz., of growth and reproduction.

The three following laws I will take in conjunction for the purpose of condensation. Every thing that lives has a limited period of active existence. Reproduction is intermittent. And there is a specific period of development.

There is a law by which the active existence of all that lives is governed and limited; man in his pride, the beast in his strength, the plant in its beauty, the insect in its agility, all at length succumb, at varying periods, to the dominion of this law. Pride, strength, beauty, and agility are the resultants of the active formative power of the original germ, which in the first instance has elaborated a highly organised nervous mass, the brain of man; in the second, the muscle, bone, and sinew of the beast; in the third, the gorgeous petal, and the delicately varying green, reflecting chlorophylle of the plant; in the fourth, the airy form, the pliant limbs, and gauze-like wing of the insect. Each has its limited sphere of action, each reproduces its kind, at intermittent periods, and each progresses to development by regularly defined stages. And are not the germs of disease limited in the sphere and time of their activity? Do they not, at intermitting periods, reproduce their kind, and progress to their development by definite stages?

I have now but sketched the main features of those laws, which, for distinction, I would call the objective laws of living things, for they refer to properties or tendencies inherent in the things themselves.

The following laws I have designated subjective, because they affect those properties or tendencies, and originate in the influence of external agents and circumstances.

There are seasons of extraordinary productiveness, both in animals and plants; at present we are unacquainted with the cause of peculiarity, but so distinct and certain is the fact, that we are compelled to acknowledge it as a law appertaining to the animal and vegetable creation. We are the more cogently led to this conclusion by the coincidence, that after great mortality by epidemics, there has always been an unmistakable and unusual increase in the proportion of births over and above the ordinary range; the peculiarity is the greater because those who fall victims to pestilential diseases are most chiefly in the limits of reproductive age.

Here we seem to recognize the workings of a watchful spirit. There are seasons of abundant and scanty harvests, to us, observing uncertain intervals, but obedient to some unseen mysterious operations of Nature's laws.

There are seasons when the germs of disease are unusually rife.

In the first six months of the year 1838, the poison of our indigenous typhus was remarkably active, and in this metropolis it carried off 2461 persons; in the corresponding months of the following year 1839, but 1045 succumbed to its influence, being considerably less than one half the number of the previous year.

The influence of climate upon living beings, whether animals or plants, has long been noticed; I do not purpose entering upon the particulars of climatic influences. The atmospheric variations as to warmth, moisture, winds, and barometric and electric disturbances are the chief elements concerned in the modifications of climate;(a) to these the functions of organised bodies have ever shown a manifest relation; under some combinations of atmospheric phenomena observing a regularity and evenness of action, and under others exhibiting disturbance of equilibrium; moreover, climate may in some instances so far interfere with the organisation, as sooner or later to extinguish the vital functions; sometimes its effects are only seen in the dwindling and degeneration of the species, at any rate, the properties of plants are much affected by the modifications of climate. To pursue this subject would lead me far beyond prescribed limits; suffice it to say, that similar effects are known to occur, and be operative on the agents of disease. It has been observed that the vaccine virus(b) loses much of its power in Bengal upon the approach of the rainy season; recovering it as the cold weather returns. The agents of disease are even perhaps more susceptible of climatic change, than matters which come more especially under the cognizance of our senses. A change of wind, an increase of wind, a variation in temperature, have all been observed to check or suspend the progress and development of the agents of epidemic and infectious diseases.

The influence of latitude and geographical position are still more remarkable than that of climate. The following is an illustration of this curious fact. It is taken from Dr Drake's work on the Diseases of North America.

"Yellow-fever, which has repeatedly prevailed in almost every town up the Mississippi to Vicksburg, N.L. 32° 24″, has never but once reached Memphis in 35°, and has not prevailed at any intervening town. Thus its limits, on the whole, have been those of the live oak, cypress, and long moss; and it will not, any more than they, be found among apple orchards, wheat-fields, and groves of blue ash, sugar-maple, and the arborescent buckeyes."

It certainly is not to temperature alone that the vegetation of the Tropics owes either its splendour or its other sensible qualities. Many facts go to prove this view; I, therefore, consider that a distinction should be drawn between climate and latitude, or geographical position.

Dr. Lindley quotes the following:—"In respect of the predominating kinds of grain, the earth may be divided into five grand divisions or kingdoms. The kingdom of rice, of maize, of wheat, of rye, and lastly of barley and oats;" and we may say, that as there are kingdoms which produce grain for the food and sustenance of man, so are there kingdoms which produce the seeds of disease for his discomfiture and destruction. There are the kingdoms of yellow-fever, of plague, of dysentery, and of typhus.

We now come to the effects of artificial heat and cold on the seeds of plants, the ova of animals, and the germs of disease. The ova of animals do not afford us any information beyond those facts connected with the oviparous tribes. It appears that the temperature at which albumen coagulates, viz., 160° Fahr., is sufficient to destroy the vitality of eggs. They do not however furnish such ready means of experiment as the seeds of plants. It has been found that the starch globules of seeds are not liable to burst, under a temperature of 167° Fahr., and that if seeds are immersed in water, at this degree of heat, for a quarter of an hour, their vitality is destroyed. They, however, bear lower temperatures for a short space of time, and at 125° Fahr., most of them retain their vitality. In dry air, many seeds will bear a temperature of 167° Fahr. Of the effect of cold, Dr. Lindley says, "No seed can germinate at a temperature so low as that of freezing, and each seems to have some one temperature more proper for it than any other, at the first dawn of its life."

The conditions necessary for the germination of seeds, are

(a) See Humboldt's "Cosmos," Vol. I. Translated by J. P. T.—P. 346.
(b) See *Medical and Chirurgical Review*.—Vaccine lymph producing small-pox during an epidemic of small-pox.

exactly such as most favour (generally speaking) the propagation and development of the germs of disease; a warm, humid, and dark atmosphere is the most favourable to them. The cold of the winter of 1664 was, according to Mead, sufficient to arrest the propagation of the seeds of the plague.

Dr. Henry showed that the germs of scarlatina were destroyed by a temperature of 200° Fahr., and that most of the poisons of disease were rendered inert by a temperature of 212° Fahr. He further states that the plague, which requires a temperature of 60° Fahr., is perfectly "disarmed" by a temperature of 90° Fahr. The poison of cow-pox is destroyed by a temperature not greatly exceeding 100° Fahr., and he believed that the highest atmospheric temperatures might destroy several of the morbid poisons. Light and electricity, though they have great influence on living things, have not been studied in their effects on the morbid poisons. We know, however, that attacks of epidemic and infectious diseases are considerably more frequent between sunset and sunrise, than at any other time.

There is a law by which all living things have a tendency to the selection of locality; it is seen to be in operation very extensively among the animal kingdom, but more especially among the varieties of the vegetable kingdom. To cite instances would only be to reiterate facts universally known. Mead states, that after the suspension of the plague by the winter's cold, it broke out again in the very same house where it commenced. Mr. Grainger, in his report on the cholera, gives the following singular confirmation of the selection of locality by the germs of disease :—"It is a striking fact, that in the midst of all these changes and deviations, the cholera has steadily held its course through one path, so bound is it to definite localities, that, with some exceptions, it has, so far as Europe is concerned, in each epidemic,—1831 and 1832, in 1837, and again in 1848,—visited and avoided precisely the same countries, and the same cities. It has reappeared in the interior of towns, on each occasion, in its old haunts: it has come back after an interval of years into the same districts and streets; nay, it has, in various instances, even re-visited identical houses, and it is affirmed, the same rooms." The Report of the General Board of Health on the Cholera, has a further confirmation of this fact:—"The first case that occurred in the town of Leith in 1848, took place in the same house, and within a few feet of the very spot from whence the epidemic of 1832 commenced its course. On its re-appearance in the town of Pollokshaws, it snatched its first victim from the same room and the very bed in which it broke out in 1832. Its first appearance in Bermondsey was close to the same ditch in which the earliest fatal cases occurred in 1832. At Oxford, in 1849, as in 1832, the first case occurred in the County-gaol. This return to its former haunts has been observed in several other places, and the experience abroad has been similar. At Gröningen, in Holland, the disease in 1832 attacked, in the better part of the city, only two houses, and the epidemic broke out in these two identical houses in the visitation of 1848."

The notions here advanced are necessarily more of the suggestive than affirmative character, from the limited space allowed to a paper for reading before a society. Nevertheless, it must not be understood that the affirmative is unattainable. I have endeavoured, though I fear imperfectly, to place the subject in that point of view from which, (demonstration being impossible at present) as Dr. Nicholl says, "to deal with probabilities, and judge of vast problems, we must weigh and balance, instead of demonstrate;" and further, "there is little hazard in at any time inferring the predominant or governing influence of some one principle, if, across all modifications, its effects stand out clear and undisguised." And here I would maintain, that to some form of life (most probably vegetable) the principle of epidemic and infectious diseases is to be referred, that the predominant or governing influence is due to reproduction, and that it is during the exercise of the reproductive faculty of the poison-germs, that the phenomena of acute disease are manifested.

In the laws of nature there is always a fact or principle which prominently stands out as an index to direct those who are desirous of intrepreting them. The fact, that bodies fall to the earth led to the discovery of the laws of gravitation, and these, as a principle, have led their investigators onwards to the explanation of some of the most wonderful phenomena of the universe. The fact that bodies yield after combustion a greater sum of weight than before the process, led to the discovery of oxygen; and oxidation, as a principle, in the science of chemistry, has, at the hands of Liebig and others, solved many of the most intricate mysteries of life and organization. I might proceed to weariness with illustrations. I am aware that the extensive reception of an error in science is a serious obstacle to progression, and that the too ready acquiescence in analogies is a dangerous proceeding; on the other hand, a neglect of analogies would much cripple experimental research. It was by analogy that the metallic bases of the alkalies became demonstrated. It was by analogy that the diamond was found to consist of pure carbon. It was reasoning by analogy that led Jenner to the demonstration of the protective power of vaccination. The dictum of Harvey—*omne vivum ex ovo*, had its origin in analogy, and having now stood for more than two centuries, it remains as unshaken as his greater discovery—the circulation of the blood.

It has been said, that supposing the doctrine here advocated be true, so much would still remain to be elucidated, it is scarcely to be hoped that this mode of accounting for disease should be transferred from the rank of a mere hypothesis. I cannot believe there are many who sympathize with these sentiments. Every invention, every discovery almost, has first assumed the form of an hypothesis in the mind of the discoverer or inventor, and had it not been for hypotheses, electric telegraphs, and locomotive engines, hydraulic presses, tubular bridges, and electric lights had never been known.

Is it nothing, in assuming this hypothesis, that we have a ready explanation of many of the mysteries of epidemic and infectious diseases? Is it better to remain in ignorance of the revolution of the earth, and to believe that it stands still while all above is moving round us? Is it better to believe that noxious vapours, miasmata, and mephitic gases mean nothing, and that all the myriads of created beings invisible to the naked eye have no signification? Neither vapours, gases, metals nor metalloids, alkalies nor alkaloids, salts nor secretions, are capable of reproducing their kind; they are therefore inadequate to the explanation of the first and most important feature of infectious disease, viz., the multiplication of the species.

Neither can the physical forces alone account for infection; it is true that a small spark may create a great flame, but the force of heat, like all forces, is derived, not generated; in the case of combustion, heat is derived from chemical change. There is doubtless much due to the influence of the physical forces in the propagation of epidemic disease. The east to west direction, with other peculiarities, indicates the probability that magnetism or electricity may be the exciting cause of the development of the germs of disease. In the track of certain currents under other necessary favouring circumstances, the poison may be operative, and out of those lines there may be no vivifying influence. The sudden cessation of epidemics in all places, which occurs with such singular uniformity, shows that as the maximum of intensity is gradually attained, so is the decline rapid. Is it not so also with vegetation? The flowers and fruits of the earth, are they not slowly evolved, and step by step matured? And when they have reached their maximum of development, do they not suddenly, in comparison with their evolution, drop their petals and shed their seeds?

Here and there may be seen a spot where a late violet or a lingering rose presents itself; here and there a later field of corn without any appreciable cause. Thus is it also found with the reaper—Death.

But here I must conclude.

The statistics of the Registrar-General exhibit features which claim our most earnest attention. It appears by the Mortality Returns for England in the year 1847, that 97,924 individuals perished from diseases included in the zymotic class; of this number nearly one-third is due to typhus alone, being 30,320.

The whole mortality was 420,977, so that nearly one-fourth of the deaths may be considered as caused by epidemic, endemic, and infectious diseases. But, besides this, may be mentioned the fact, that there is a rapidly-increasing belief in the communicability of phthisis; and, should this disease prove to be of an infectious nature, we might add 53,317 more deaths to the zymotic class, by which the range of mortality will be increased to upwards of one-third.

We have, therefore, much reason for attempting to discover some laws of a general nature; and these are to be found among the most pestilent and highly contagious maladies.

It has been my endeavour to point out some of these laws as subjects for discussion, in the hope of eliciting observations of more value than those I have had the honour of submitting to you. The extreme difficulties and intricacies of the subject are my only apology for so imperfect and incomplete an abstract of a vast inquiry.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

By HENRY SMITH, Esq., F.R.C.S.

(Formerly House-Surgeon to the Hospital.)

DISEASE OF LARYNX, RENDERING THE OPERATION OF TRACHEOTOMY NECESSARY.

Among several very interesting cases which have been admitted into the surgical wards of this hospital, since the commencement of the present session, has been one which we shall give at some length. It is an instance of serious disease in the larynx, in which the symptoms were of such a nature as to induce the surgeon to perform the operation of tracheotomy for relief. The operation, unfortunately, did not succeed in saving the patient's life; but the *post-mortem* examination, an account of which we shall append, revealed the condition of the parts, and showed that the proceeding was absolutely called for, and perfectly justifiable.

Richard Maegee, aged fifty, a man who had lived intemperately, by trade a rope-maker, living in Wisbeach, was admitted into the hospital October 16th, with disease of the larynx. Four months previous to his admission he was seized with a severe catarrh, which remained upon him; the most prominent among the symptoms was a soreness of the throat, accompanied with hoarseness and cough, but very little expectoration. He had had an attack of the venereal disease five years ago, but it was not succeeded by any affection of the throat or other secondary symptoms. He placed himself under the care of a surgeon, who used various remedies, general and local. Counter-irritation to the region of the larynx was especially used, but no beneficial result accrued. There was difficulty of breathing more or less severe, and lately (since a month) it became more distressing. The patient came to London and was seen out of the house by Mr. Fergusson, who carefully examined him, and, having considered that there was extensive disease of the larynx, and that it was a case in which the operation of tracheotomy would be admissible, sent him into the hospital for the purpose of performing the operation if the symptoms did not yield.

When admitted he was very weak; his breathing was laborious, frequent, and quick, and accompanied with the peculiar stridor which is noticed in instances where there is much narrowing of the aperture of the larynx; the countenance was anxious and the face dusky; he was restless at night; the pulse varied from above 100.

After he had remained in the house for some days the symptoms became aggravated. He now began to get delirious at night, attempting to get out of bed; the face became more dusky, and the breathing was observed to be more laboured. On the 22nd, Mr. Fergusson saw him in conjunction with Dr. Todd, who carefully examined his chest with the stethoscope, and, finding nothing indicative of diseased action in the lungs, agreed with Mr. Fergusson in the propriety of attempting to relieve the sufferings of the patient by the performance of the operation of tracheotomy. Consequently, on the 23rd, at 2 p.m., the patient was brought into the theatre for that purpose. Dr. Snow was asked his opinion as to the propriety of giving the patient chloroform, and offered to administer it. The anæsthetic agent was cautiously and slowly inhaled, until the man was fully under its influence; at which period an apparently unfavourable change came over the patient,—the pulse fell, the face became pallid, the eyes upturned, the inspirations were drawn slowly and at long intervals, and, indeed, death appeared to be imminent. Mr. Fergusson now rapidly made an incision, about two inches in length, through the skin, cellular tissue, and fat, over the lower part of the trachea; and then, getting between the sterno-hyoid and thyroid muscles, exposed the trachea. A good deal of bleeding now took place, and it was necessary to wait a few moments before opening the trachea. This was effected after some difficulty, in consequence of the convulsive movements of the windpipe, by a sudden jerk of the knife. Immediately air issued forth from the opening, which, however, was not sufficiently large. In order, therefore, to allow the speedy entrance of air, and to enlarge the wound, Mr. Fergusson placed the handle of the scalpel into the wound, and, turning it round, held its flat surface against the upper extremity of the incision in the trachea, and, by this manœuvre, allowed a good quantity of air to get down the tube. The incision in it was now enlarged by the knife being carried upwards, and a silver tube was placed in and fixed. Immediately this was effected, a favourable change took place in the condition of the patient; the face was restored to its natural colour, the eyes became bright, the pulse rose, the hands became warm, and the respirations, instead of being convulsive, difficult, and drawn at long intervals, were rendered comparatively easy. In this state he was carried to bed, and he immediately fell into a sound sleep, and continued sleeping for some time.

At 10 p.m. he was pretty easy; had not suffered much from irritation. An attendant was placed to watch him constantly, and directed to clean the tube with a feather whenever it appeared to be blocked up with mucus. He had taken some brandy and water and beef-tea, and this he was enabled to swallow well, and without its causing irritation. Pulse 108; respirations 24.

24th, 10 a.m.—Had passed a restless night. Countenance is not so good as it was; tongue is furred, but moist. He complains of feeling weak and low; he nevertheless breathes freely through the tube. Pulse 110; respirations 32. To continue beef-tea, wine, and gin.

This evening, Mr. Fergusson visited him, and perceiving that the tube did not admit the air so readily, he removed it, and there was some trouble caused in re-introducing it after it had been cleaned, and considerable irritation was caused; however, the patient fell asleep afterwards and continued slumbering until 12 o'clock, when he awoke and became rather restless.

25th, 10 a.m.—Is in a pretty good condition; pulse, 120, small, respirations, 22; countenance good, air entering through the canula very freely; not much respiratory murmur audible in the lungs, and the chest does not expand well; he takes beef tea and brandy.

26th. This day he appears better than he has done since the operation; his countenance is better; he breathes without much difficulty; respirations, 25; pulse, 124; tongue clean and moist; he takes plenty of stimulants, wine and brandy, and beef tea. The integuments about the wound, however, are a great deal inflamed, the appearance being erysipelatous.

27th, 10 a.m.—Has passed a restless night, being delirious, but this morning he breathes well, the air entering readily through the tube; his countenance is rather anxious, but the tongue is moist and clean; pulse, 116; respirations, 24; continue nourishment and stimuli.

10 p.m.—He does not seem to be so well this evening; he has been very delirious, and his countenance is heavy; pulse, 120, small; chest does not expand by any means freely; in consequence of the delirium his quantity of wine has been increased.

28th.—Has passed a pretty good night; when Mr. Fergusson paid his visit to-day he removed the tube, and, finding that it did not very easily enter into the trachea again, he enlarged the opening somewhat, and ordered a larger and longer tube to be made. This was introduced in the evening.

29th, 10 a.m.—Is not nearly so well this morning; the erysipelatous flush has extended, and he has passed a very restless night, so much so, in fact, that the attendant thought that the patient was dying. The countenance is anxious and more dusky; the skin is damp and clammy; the tongue is more foul than it was; the respiration is very laboured; very little normal murmur is audible in the lungs, but there is crepitus high up on either side; there is a great deal of mucous discharge from the wound; the pulse is 128; respiration, 32. The tube keeps in the wound well, and admits air well.

10 p.m.—Still in a very bad state; breathing with great labour; countenance anxious and dusky; face covered with a dense perspiration; very little normal respiratory murmur audible in the lungs, but a great deal of crepitus can be heard in either lobe; the tube has been displaced by the convulsive action of the windpipe, as it is drawn somewhat violently upwards and downwards. There is a large quantity of mucous secretion, which gets into the wound, and it apparently accumulates in the trachea as well; for there is a good deal of cough, but the patient has not strength to eject it; the inflammation in the skin does not subside; he takes large quantities of brandy.

30th.—He passed a very bad night, and this morning it was evident that he would not last long. He died at 3 p.m., just one week after the operation.

Post mortem Examination.—Body well formed; tissues generally very soft. Mr. Fergusson himself carefully dissected the parts, so as to show them *in situ*, and to give the pupils the opportunity of their seeing the different important textures which were in the neighbourhood of the part operated upon; for this means, a care-

ful dissection was in the first place made of the whole of the laryngeal and tracheal region, and of the muscles which bound and cover them. In the first place, it was noticed that the muscular tissue was excessively soft. There were various deposits of unhealthy pus about the wound and underneath the muscles. The right sterno-thyroid muscle was very much changed in its texture, being infiltrated and somewhat hardened. The wound in the trachea was seen to have been made exactly in the median line, the knife having penetrated the four upper cartilages; and having gone through the connecting band of the thyroid body, portions of the cartilages themselves were quite bare, and would undoubtedly, had the patient survived, have become necrosed. Attention was now directed to the vessels in the neighbourhood of the incision, and just in front of it, at its lower part, a large vein was seen going to join the innominata, which had been in the way, but had been avoided during the operation. Just below, and on the right side, not more than half an inch from the lower extremity of the incision into the trachea, was seen the arteria innominata rising higher up in the chest than it usually does. About one inch below the extremity of the wound, ran also, but in a transverse direction, the great vein, the vena innominata.

The whole of the respiratory apparatus was now taken out and carefully examined. On looking at the entrance of the larynx, before slitting it up, the cause of the patient's embarrassment of breathing, and the justification of the operation which had been put in force, were at once seen, for the aperture in the glottis was narrowed to little more than a mere chink, in consequence of a great thickening and bulging inwards of the right arytænoid cartilage. The epiglottis itself, on both surfaces, was perfectly healthy. On looking at the inside of the larynx, its whole inner surface, limited above and below by the borders of the thyroid cartilage, was in one state of ulceration. The mucous membrane of the whole of the trachea, and of the larger bronchial tubes, was also very much reddened. No obstruction was found there; and the lungs were, with the exception of some congestion posteriorly, perfectly healthy. The heart was dilated, and covered with fat; its walls were much thinned, and its muscular texture very attenuated.

This case must be looked upon as one of considerable interest; and, although the operation, which had been performed for the purpose of relieving the man, did not succeed, the interest and instruction are perhaps not on that account diminished, inasmuch as the opportunity was presented of seeing the real nature of the disease, which was somewhat involved in obscurity, and also of learning, that the operation was not only fully justifiable, but even absolutely necessary, to give the poor man some relief from his sufferings.

Before the operation, and even before the patient's death had permitted one to ascertain with exactness the condition of the larynx, it might have been supposed that the case was not one sufficiently dangerous to demand so severe a procedure as that of tracheotomy; for, although there was very great embarrassment of breathing, and general constitutional disturbance, which showed that the lungs and brain were both materially interfered with in their functions, at no period, perhaps, was there that very imminent danger of suffocation which obtains when the surgeon usually considers himself warranted in putting in force the last resource. However, the progressive course of the disease, the gradual aggravation of the symptoms, the entire loss of voice, and the peculiar stridor accompanying the difficult attempts at respiration, indicated to a certainty that there must have been some serious obstruction at the entrance of the windpipe, which could not be overcome by the remedies which had been tried, and which are usually available in chronic ulceration of the larynx. Mr. Fergusson, therefore, after having ascertained that none of the patient's bad symptoms resulted from any morbid condition of the lungs themselves, decided to perform the operation of tracheotomy, for the purpose of relieving the patient. At the time he did so, he stated that he had done this operation, not as a last resource, but as an auxiliary means to other treatment which would have to be adopted. It was hoped that, if free entrance for the air could be obtained through an opening in the trachea, the diseased portion of the windpipe would be set at rest, would be freed from irritation, and thus remedial and natural means would be much more likely to effect a cure, or, at all events, a permanent amelioration of the distressing symptoms.

The principle of the operation here was the same as that obtaining in certain cases of impassable or obstinate cases of stricture of the urethra which resist the employment of the catheter. This irritability of the stricture is mainly owing to the irritating qualities of the urine which is constantly passing through it and coming in contact with it. To obviate this, the surgeon makes an opening into the urethra, behind the strictured portion, and allows the free exit of urine. What is the consequence? The diseased portion of the urethra being no longer irritated by the passage of the urine, becomes in a short time quiescent, and the stricture gets more relaxed, and comparatively little difficulty will be met with in the use of the catheter. In the same way, then, will the diseased larynx have a much greater chance of recovering its integrity and proper functions, if it is kept as much at rest as possible, and the air is not allowed to irritate it.

By the death of the patient, however, in the instance just related, the result which was anticipated was frustrated; and therefore perhaps no evidence can be adduced from this case to show how far such a line of treatment would be beneficial under like circumstances, and for such an object as that just spoken of. It, however, must not be overlooked, that the *post-mortem* appearances showed that the operation was absolutely necessary, for the chink of the glottis was so much narrowed by mechanical means, that the function of respiration would in all probability shortly have been so much interfered with, as to produce suffocation. And, independently of this, the ulceration, so extensive within the larynx, would of itself have been sufficient to cause the most urgent danger.

The cause of death in this case can hardly be satisfactorily accounted for. At first, from the symptoms a day or two previous to his death, it was thought that this depended to a great extent upon the gorged condition of the lungs, but after death it was found that there was but little disease and not much collection of mucus in the bronchial tubes. There was some difficulty with the tube, but nevertheless Mr. Fergusson was satisfied that the patient got plenty of air through the artificial opening. That gentleman was of opinion, that the fatal result was owing to the unhealthy nature of the inflammation which had been set up in the neighbourhood of the wound, and also by the irritation of the disease existing within the larynx. It must be borne in mind, that the man was a great drinker, that his heart was flabby and weak, and that therefore he was a bad subject for any operative procedure.

There was one circumstance connected with the operation in this instance which cannot fail of striking any ordinary observer, and that is the fact of the patient having been placed under the influence of chloroform. Now, there is an especial interest in this point, inasmuch as it is generally considered that there is great danger in administering this powerful agent in any cases wherein the respiratory process is embarrassed or interfered with. Surgeons are generally chary of giving it in operations connected even with the inside of the mouth, on the upper or lower jaw. However, Dr. Snow, on being appealed to in this case, did not hesitate in recommending its adoption, and Mr. Fergusson yielded to that gentleman's advice. Dr. Snow does not consider that it ought to be withheld in such cases, if it is given cautiously. He had already, and only a few weeks before, given chloroform in a case where the trachea was opened under circumstances of difficulty by myself, and the beneficial effect in this instance was such as to warrant the use of it in cases of similar emergency. That the agent, however, should be administered with the very greatest caution in such cases, and that it should be carefully watched, is evident from the effects which were produced in this patient, for there can be no doubt that the dyspnœa was rendered greater, and that the chance of impending suffocation, at the least, appeared more imminent than before he was placed under its influence. It would be well, therefore, in any one who uses it in similar circumstances, to be excessively cautious, and to watch its effects with the utmost vigilance, otherwise serious results might happen from it.

The Water Supply to the Metropolis.—The vestries of St. Pancras and St. Marylebone have determined to appoint a committee to communicate with the other metropolitan parishes, and to watch over all Bills introduced for the purpose of a water supply, opposing all such as have a tendency to a centralising power, or to monopoly. They contend that the inhabitants of London, using the word in its most comprehensive sense, have a right to a purer and a cheaper supply of water, and to exercise the necessary control over that supply by means of parochial, and not of Governmental or monopolising delegates.

British Guiana. — Two Bills have been introduced in the Court of Policy, prepared by Dr. Gavin, Her Majesty's Inspector for the West Indies. The first of these Bills has been discussed under the title of the Nuisances Removal Bill. The other, called the Public Health Bill, has been sanctioned as far as its fourth clause; but, in consequence of doubts existing whether the remainder of its clauses could be practically carried out, in a country circumstanced like this, supposing even they were approved of, the Court, on the recommendation of the Governor, agreed to refer the whole of the matters embraced in both these Bills to the Attorney-General.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Jan. 17.—Medical Society of London. *Subject*:—Dr. Handfield Jones, "On the Liver and its Secretion." Eight o'Clock.

Monday, January 19.—Statistical Society of London. *Subjects*:—1. Lieut.-Col. W. H. Sykes, "On the Taxation and Revenue of the Free City of Frankfort-on-the-Maine." 2. Mr. J. Crawford, "On Coffee." Eight o'Clock.

—— —— Chemical Society. Eight o'Clock.

Tuesday, January 20.—Royal Institution. *Subject*:—Professor T. Wharton Jones, "On Animal Physiology." Three o'Clock.

—— —— Pathological Society of London. *Meeting of Council.* Seven o'Clock.

Wednesday, January 21.—Geological Society. *Subjects*:—1 C. H. Weston, Esq., F.G.S., "On the Purbeck and Portland Rocks of the South of Dorsetshire." 2. D. Sharpe, Esq., V.P.G.S., 'On the Southern Borders of the Highlands." 3. D. Sharpe, Esq., "On the Quartz Rock of Scotland." Half-past Eight o'Clock.

Thursday, January 22.—Royal Institution. *Subject*:—Rev. J. Barlow, M.A., Sec. R.I., "On the Physical Principles of the Steam-Engine." Three o'Clock.

Friday, January 23.—Royal Institution. *Subject*:—Professor Faraday, "On the Lines of Magnetic Force." Half-past Eight o'Clock.

Saturday, January 24.—Royal Institution. *Subject*:—Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

—— —— Medical Society of London. *Subject*:—Dr. Tilt, "Clinical Illustrations of Subacute Ovaritis." Eight o'Clock.

Medical Times & Gazette.

SATURDAY, JANUARY 17.

THE NAVAL ASSISTANT-SURGEONS.

The world is just now supposed to have rather too much of despotism. An autocrat at St. Petersburg, another at Paris, a third at Naples, and three or four more at Vienna, Berlin, and Pesth, might by some be thought to be as many as patient mankind could possibly endure. As usual, Britons alone are supposed never to be slaves, and hardy must be the imagination of the man who could conceive it possible that the free Anglo-Saxon breed should crouch and whine under the lash of tyranny, as if he belonged to a nation which had never known freedom, or had known too much of it.

The notion that a Briton can be neither a despot nor a slave is one of those harmless delusions which it seems a pity to destroy. Yet it would not give us much trouble to adduce many instances of both facts. Among a batch we select one. A good opportunity now offers, by which any curious or incredulous individual may experience in his own person the delights of serfdom, and may contemplate in another the pleasures of autocracy. All he has to do is to engage himself as an Assistant-surgeon in the Royal Navy, and take for his first voyage a trip to the Mediterranean under Sir William Parker. On his return, he will probably go to Paris to breathe the air of freedom, or will emigrate to Russia to regain the sense of personal independence.

A Russian is compelled to remain in a country, almost as large as the rest of Europe, unless he can obtain permission to travel; an Assistant-surgeon in the Royal Navy is not allowed to rest in a small cabin 6 feet by 4; one slave can't go, but the other can't stay, and the greater hardship is with the latter. A Russian, if he prove unruly, is sent to Siberia; but an Assistant-surgeon who gives any trouble is in a fair way for a cruise on the West Coast of Africa; and the chance of being frost-bitten is better than yellow-jack. A Frenchman, when he writes an article in a newspaper, is obliged to sign his name to it; but an Assistant-surgeon dare not, for the life of him, put even his initials to his communication, or, if he dare, signifies that it is "most private and confidential." The French nation has now thrown itself at the feet of a dreaming fatalist; but Assistant-surgeons of our Royal Navy deliver themselves up to the tender mercies of a set of crabbed old men, who have been taught tyranny, not by the remembrance of imperial power, but by the customs of an overbearing service, and by the exercise of unchecked and unlimited command.

We may talk as we please of serfs and freemen, of enslaved Russians and free-born Englishmen, but our liberty, if it is to be found on land, does not exist on that element which Britons are traditionally supposed to rule. At any rate, the Assistant-surgeon does not find it there. He may go on board his first ship believing that he is a gentleman and an officer, but he will soon find out his mistake. He will soon discover that there is no man in the ship, whatever his rank, who is not more independent and more comfortable than he is. Others have their privileges; he has them, yet has them not; others know their due, and get it; he remains in a state of charming suspense, hoping for what may be his, yet generally finding he is not destined to have it. Snubbed by every one on board, even perhaps by his own Surgeon,—so soon does the unnecessary martinetism of the service tell on every one,—the unfortunate Assistant-surgeon hangs in a kind of central region, midway between officers and men, regarded with something like contempt by the former, and with a kind of patronising pity by the latter.

Two years ago, a desperate attempt was made by this unfortunate class to force themselves out of an intolerable position, and to assume the ground to which they were entitled alike by birth, by education, and by useful service. This attempt was so far successful as to lead to a vote of the House of Commons, entitling them to certain privileges. The immediate cause of this vote was the extremely clear and incontestable manner in which the case of the Assistant-surgeons was stated by Captain Boldero, and the strong support given to his speech by the numerous petitions which were sent by the medical corporations and schools, and by private practitioners. The House could not resist the justice of the plea nor the urgency of the petitions; it passed a resolution, and the Assistant-surgeons thought their cause was gained.

Another resolution, however, is necessary; and this time we hope the House of Commons will make it sharp enough. In its way, the House is as despotic as neighbouring powers, and can, if it please, assert its authority. The Admiralty are not, at present, in the best odour. The public has at last found that it has been paying dearly for useless goods; and the next session may perchance see some sweeping changes in our naval administration. The Assistant-surgeons will surely not be forgotten. A system which drives out of the service half the men who enter it, and which destroys the efficiency of a most important branch, will not be suffered to endure. A system by which education and improvement are rendered almost impossible in a class of men, in whom it is above all things necessary that they should continue to improve themselves, and to discharge properly their urgent duties, must be put aside.

Some years ago Irishmen were somewhat wearied with the continual advice, that if they would be free,

"Themselves must strike the blow."

This advice we would tender to all who think of entering the

naval service. From this time till the subject is brought before Parliament, let every candidate for the service hold back his name. Let those whose names are already on the list withdraw them, if they can, without injury to themselves. At any rate, let no more be added, that it may be stated in the House of Commons, that speedily there will be no possibility of carrying on the naval medical service. That this will be the result we do not doubt. A great and general distaste to the service has existed for a long time, which was only partially removed by the privileges granted two years ago. Now, when it is found that tyrannical captains and admirals may neglect positive resolutions of Parliament, and may treat gentlemen and professional men as if they belonged to an inferior service, and to a lower caste, we do not believe that any one who values independence of character and the sense of personal dignity will put himself in a position where he must sacrifice both the feelings and the habits of a gentleman.

THE VOTE BY PROXY.

It is now little more than ten years since a Charter, empowering the Council of the Royal College of Surgeons of England to create a new order among its members, together with the introduction of the electoral principle, was granted and confirmed. That the introduction of a new and higher title would meet with opposition, especially as the primary fellows were elected from among the mass of members—not by the latter, but by the Council—might be easily anticipated. But, with the progress of time and the entrance of other Fellows by examination, the outcry has gradually diminished. Still, sufficient discontent has remained to stimulate the Council to further concessions in the proposed new Charter, whereby, in progress of time, and by the expenditure of a few pounds, the coveted honour may be obtained by every member who possessed the right to enter the portals of the College prior to the year 1843, and has so conducted himself as to secure the esteem of four existing Fellows of the College. One important result of this concession will evidently be, that the number of Fellows, and consequently of electors to the Council, will be largely increased, and the electors themselves will be widely scattered through the length and breadth of the land. In another clause of the proposed Charter, the exercise of the franchise is confined to the hall of the College—all absentees at the time of election being excluded from voting. We know not the motives which have determined the majority of the members of the Council in framing this clause: but, however satisfactory to themselves those motives may be, we are confident that the clause itself will be most unpopular; that it will neutralize the pleasure with which otherwise the new Charter would have been received; and that the agitation which the bestowal of the latter ought to have allayed, will proceed as energetically as before. The Council will be accused of endeavouring to keep all the power in their own hands—of being animated with a desire to exclude the country surgeons from taking any share in the election, because they (the Council) can, by the influence their position gives them, determine the votes of so many resident Fellows as to turn the election in favour of their own candidates. This is not as it should be. The Council ought to remember, that it is not the aspirants to surgical posts at the Metropolitan hospitals alone who are capable of forming a judgment of the men best suited to advance the welfare of the Profession. Are our Heys, Normans, and Hodgsons, incapable of bestowing their vote independently and with sound discretion?

If the power of voting be conceded to those only who present themselves within the walls of the College at the time fixed for the election, it is evident that a very large proportion of the country Fellows can never exercise their rights. Men engaged in active and extensive practice in the more remote parts of the provinces cannot be expected to take a long journey to London at a certain pecuniary loss, to exercise a right which is not of paramount individual interest.

To deprive these men of a vote—and to declare that those only who appear at the College on the day of election are to vote, is so to deprive them—will be an act of injustice which the Council, if they should be unwise enough to commit it now, will one day have to repair. The time has passed when it was dreamed that all wisdom, medical and surgical, was concentrated in the Metropolis. Men educated in Provincial schools have carried off the highest honours from the students of the great London Hospitals, and that when the prizes were awarded by London Surgeons and London Physicians. And are the teachers of these men to be told, that, because they breathe the air of Bristol and of Leeds, they are incapable of deliberately weighing the merits of the candidates for office, of exercising a judgment on those merits, or of honestly recording that judgment?

With nothing short of the *power* to exercise the *right* of voting for the members of the Council of the College of Surgeons ought the Fellows of the College to be contented,—and with nothing short of that will they be contented. They have the right,—this clause deprives them of the power of exercising that right. Yield on the point ultimately the Council must, because the claim put forward is an honest,—a just one. Let them then yield at once, while they may with a good grace; or they may pause till they not only have to eat their leek, but have to proclaim to the world that they have done so on compulsion.

EAST INDIA COMPANY'S REGULATIONS.

The following important Regulation of the Court of Directors of the East India Company will come into operation in March next:—

"It is expected that the assistant-surgeon shall produce a certificate of having diligently attended, for at least three months, the practical instruction given at one of the asylums for the treatment of the insane, and at one of the institutions or wards of an hospital especially dedicated to the treatment of ophthalmic disease. He will also be required to attend a course of lectures on the principles and practice of military surgery, if such a course shall be given at the place at which he has been educated."

We believe that these rules, which were proposed by the able and excellent Examining Physician to the Company, Dr. Scott, will be of the greatest service. In India mental diseases are comparatively frequent among the Europeans, and diseases of the eyes are remarkably so. There could not have been pointed out two subjects on which the young members of the service are generally less informed. Some indeed may have studied carefully the diseases of the eyes, but hardly one in a hundred has ever had the opportunity of seeing more than a few chance cases of insanity. Dr. Scott has introduced a great improvement, and, if properly carried out, the service will be very much benefited. The student will be put to scarcely any additional expense, as at most of the London, and at some of the provincial hospitals his hospital fee now includes instruction in ophthalmic surgery, and the enforced attendance at an asylum will not fall hardly upon his resources, while it will very greatly increase his utility in India. We have little doubt Dr. Scott's example will be followed in the other

public services, and we congratulate him on the effects which must result from his useful and important recommendation.

MEDICAL ETHICS.

In our last Number we published a correspondence between Mr. Noble and Mr. Windsor, forwarded to us by the Secretaries of the Manchester Medico-Ethical Association. The facts of the case are briefly as follow:—

Mr. Noble was sent for late in the evening to visit a lady whom he had never previously seen professionally. He found an unqualified practitioner,—a man without any diploma or licence,—in attendance. This man Mr. Noble declined to meet, prescribed, and left the patient, promising to call on the following day. The irregular practitioner, naturally dissatisfied with Mr. Noble's conduct, looked about for one occupying a good position in the town, but less scrupulous than Mr. Noble in reference to medical ethics. Such a man he found in Mr. Windsor, and forthwith summoned him to visit the case. Mr. Windsor accepts the honour of being taken by this irregular practitioner to the house of the patient, and there consults with this irregular practitioner on the line of treatment to be adopted. Mr. Noble's prescription was examined by Mr. Windsor, and the remedies just ordered by Mr. Noble were stated by Mr. Windsor not to be suited for the case. Mr. Noble was not consulted as to the reasons that had led him to advise the administration of the drugs he had prescribed; but the irregular practitioner's account only of the case was received.

"If you see nothing objectionable," says Mr. Noble, in Letter 7, "in the practice of meeting, in consultation, persons unqualified, you are simply at issue with the worth and respectability of the Profession." With this opinion of Mr. Noble, our readers will, we are satisfied, coincide. Should Mr. Windsor repeat his consultations with irregular practitioners, it will be the duty of the qualified practitioners of Manchester to determine whether he shall not be left to consult with irregular practitioners only,—whether, in fact, they ought not to decline all professional intercourse with him.

The advantage of a Medico-Ethical Association is well illustrated by this case. It is no longer a personal dispute or quarrel. The question is now between Mr. Windsor and the Medico-Ethical Association; it is now Mr. Windsor *versus* the whole Profession of Manchester. Would that in every county there was a well-supported Medico-Ethical Association, and the whole united into one body by a Central Committee.

REVIEWS.

Physiological Chemistry. By Professor C. G. Lehmann. Vol. I. Translated from the Second Edition by George E. Day, M.D., F.R.S., Fellow of the Royal College of Physicians, and Professor of Medicine in the University of St. Andrews. 8vo. Pp. xii. and 445. London: Printed for the Cavendish Society. 1851.

[Second Notice.]

We now proceed to Lehmann's second great division, the *nitrogenous basic bodies*, which are divided into the *non-oxygenous alkaloids* and the *alkaloids containing oxygen*. The former are of little physiological importance; the latter include creatine, creatinine, tyrosine, leucine, sarcosine, glycine (glycocoll), urea, xanthine, hypoxanthine, guanine, allantoine, cystine, and taurine. We must confine our remarks to the last named substance.

Taurine was discovered by Gmelin, who termed it *biliary osparagin*. It crystallises in colourless hexagonal prisms, is hard, and crunches between the teeth. It contains rather more than 25 per cent. of sulphur,—a fact overlooked by Demarçay, Pelouze, and Dumas, by all of whom this substance was analysed; and detected by Redtenbacher. In connexion with its physiological relations, we may observe, that it has never been found isolated in the healthy organism, although it apparently occurs in this state in morbid bile. It is contained preformed in normal bile, where it occurs as an adjunct of the cholic acid, to which we have already alluded.

Although some of the products of the decomposition of bile occur in the excrements, especially in cases of diarrhœa, taurine has never yet been found there, nor has it been detected in bilious urine. Lehmann refers the seat of the formation of taurine, or of its proximate constituents, to the blood, where, however, it cannot be detected, in consequence of its being removed as soon as it is formed.

"Nothing is at present known regarding the different steps that occur in the formation of taurine; it is, however, not improbable that the sulphur of the albuminous food, in its conversion into the elements of tissues which are either free from, or poor in sulphur, yields in part the materials for the formation of taurine."

The *conjugated acids* next claim our attention. As the term *conjugated* or *copulated acid* may be new to some of our readers, we shall attempt to explain it. We have recently become acquainted with certain acids, which, when united with another and more basic body, not only lose nothing of their acidity, but, which is more singular, perfectly retain their former saturating capacity. An acid of this class, after being combined with its adjunct or copula, still saturates the same quantity of base as if the organic matter associated with it did not exist; and this adjunct, which follows the acid as an integral constituent in all its combinations, exerts an essential influence on its physical, and even on many of its chemical characters. According to this theory, we may regard formic, acetic, metacetonic, butyric, valerianic, and caproic acids as conjugated oxalic acids, the adjunct being a carbo-hydrogen of the form $C_n H_n + 2$, and the acidifying principle being oxalic acid. Thus:—

Formic acid ..	$C_2 H_2 O_3$	$HO =$	$H C_2 O_3 + HO$
Acetic acid ..	$C_4 H_4 O_3$	$HO =$	$C_2 H_3 C_2 O_3 + HO$
Metacetonic acid	$C_8 H_6 O_3$	$HO =$	$C_4 H_5 C_2 O_3 + HO$
Butyric acid ..	$C_8 H_8 O_3$	$HO =$	$C_6 H_7 C_2 O_3 + HO$
Valerianic acid..	$C_{10} H_{10} O_3$	$HO =$	$C_8 H_9 C_2 O_3 + HO$
Caproic acid ..	$C_{12} H_{12} O_3$	$HO =$	$C_{10} H_{11} C_2 O_3 + HO$

The conjugated acids considered in the present division are, however, all nitrogenous. They are picric acid, (which is noticed in some detail, both by way of general illustration, and because it is a frequent product of the decomposition of nitrogenous substances by nitric acid), and hippuric, uric, inosic, glycocholic, hyocholic, and taurocholic acids.

We extract the following remarks on the presence of *hippuric acid* in human urine:—

"Attempts have been made to refute Liebig's assertion, that hippuric acid always exists in human urine, at least after the use of vegetable food; but although I formerly did not succeed in detecting this acid in my own urine during a purely vegetable diet, I have since convinced myself by experiments, both on large and small quantities of urine, that it is constantly present during the use of a mixed diet. . . . . In morbid human urine I have almost always been able to detect hippuric acid; it especially occurs in large quantity in acid febrile urine, whether the fever be typhus or be associated with pneumonia, or any other pathological process. Before hippuric acid was discovered in healthy human urine, I detected its presence in diabetic urine, in which it is more easily recognised than in other forms of urine which abound in extractive matters. In diabetic urine, I have found hippuric acid in every instance in which I have sought for it; Ambrosiani, Hünefeld, and others, have also found it in the urine during this disease; Bouchardat found it in a case of what is called diabetes insipidus, and Pettenkofer found it in large quantity in the urine of a girl with chorea. . . . . In the strongly acid urine which is sometimes passed in fevers, the acid re-action is in a great degree dependent on the hippuric acid; from the etherial extract of urine of this nature, and without the preliminary addition of any acid, we often obtain the most beautiful crystals of hippuric acid. . . . . I have not been able to establish any relation between certain morbid processes or groups of symptoms, and the amount of hippuric acid contained in the urine."—Vol. I., pp. 196-7

Passing over the Chapters on the Haloid Bases and Haloid Salts, and on the Lipoids, which extend over nearly seventy pages, and contain a full account of the chemistry of the fats, we extract from the Chapter on Non-nitrogenous Neutral Bodies the following observations on the mode of testing for glucose or diabetic sugar. The only tests on which Lehmann places any reliance are Trommer's, the fermentation test and the development of the torula, and the application of Biot and Soleil's polarising appa-

ratus. The following is the best method of applying Trommer's test to an animal fluid suspected of containing sugar.

"The fluid to be examined is treated with caustic potash and filtered if necessary,—that is to say, if there be too great a precipitate; an excess of caustic potash is productive of no harm, as it should be present in more than sufficient quantity to decompose the sulphate of copper; the latter, which must be added gradually, and in a diluted state, usually gives rise to a precipitate, which disappears when the fluid is stirred; as the quantity of the oxide of copper which is soluble is proportional to the quantity of sugar which is present, very little sulphate of copper must be added at a time, if we suspect that only a little sugar is present in the fluid. On allowing the azure solution thus obtained to stand for some time, there is usually formed a more pure red or yellow powder than the precipitate which is at once thrown down on boiling the fluid. Moreover, very prolonged heating is improper, for there are several substances which by prolonged boiling separate suboxide of copper from alkaline solutions of oxide of copper; amongst them we may especially name the albuminous substances, which with oxide of copper and potash yield very beautiful azure-blue, or somewhat violet solutions, and by very prolonged boiling, separate a little suboxide of copper, although without the aid of heat they have not this property.

"If a specimen of urine contain very little sugar, or if we are searching for sugar in some other fluid, it is advisable to extract the solid residue with alcohol, to dissolve the alcoholic extract in water, and to apply the potash and sulphate of copper to this solution. By proceeding in this manner, we usually obtain the re-action in its most distinct manner. If, however, we are seeking for very small quantities of sugar, as for instance in chyle, blood, or in the egg, we must neutralise the aqueous fluid, previously to its evaporation, with dilute acetic acid, in consequence of the solubility of albuminate of soda or of casein in alcohol, thus preventing any albuminous body from remaining in solution. If the re-action do not properly manifest itself in the alcoholic extract thus obtained, or if we would carry the investigation further, we must precipitate the sugar from the alcoholic solution by an alcoholic solution of potash, dissolve the compound of sugar and potash in water, and now apply the sulphate of copper; if only a trace of sugar be present, we obtain a most distinct and beautiful reaction."—Vol. I. Pp. 284-5.

Trommer's test may also be successfully employed in the quantitative determination of sugar in diabetic urine. In page 288 the reader will find a description of the mode of preparing a test-solution for this purpose.

From the Chapter on Colouring Matters we extract the following observations on hæmatoidin, a substance discovered, or at all events first accurately described, by Virchow. It occurs in an amorphous condition in granules, globules, and jagged masses, as well as in perfectly-formed crystals, which are strongly refractive and transparent, are of a yellowish red, red, or ruby colour, and are insoluble in water, alcohol, ether, acetic acid, dilute mineral acids, and alkalies. It may always be found in the sanguineous extravasation, occurring in consequence of the bursting of the Graafian vesicles at the periods of menstruation or conception, and frequently occurs in old extravasations of the brain, in obliterated veins, hæmorrhagic infarctus of the spleen, in subcutaneous sugillations, and in purulent abscesses of the extremities. It has never yet been obtained in sufficient purity or quantity to admit of analysis; but as our Author observes, "the occurrence of the substance in sanguineous extravasations whose metamorphoses have been most admirably traced out by Zwicky, Bruch, and Virchow, denotes as decidedly as chemical experiments could do, that it is formed from hæmatin; moreover, several of its properties indicate its close affinity with the last-named substance."

We make no extracts from the two concluding Chapters on the Nitrogenous Histogenetic Substances, and the Mineral Constituents of the Animal Body, for where all is excellent it is difficult to make a selection. We trust, however, that we have already sufficiently indicated the character of Lehmann's "Physiological Chemistry," to induce all our readers who take any interest in this fruitful department of scientific inquiry, at once to enrol their names as members of the Cavendish Society.(a)

We cannot conclude this rather long review of Lehmann's really great work without expressing our conviction, that the Council of the Cavendish Society have shown great judgment in selecting the present work, and intrusting its translation to so able a chemist and scholar as the Editor of Simon—the talented Professor of Medicine in the University of St. Andrews.

(a) We may state that T. Redwood, Esq., of 17, Montagu-place, Russell-square, is the Secretary to the Cavendish Society, and that he will be happy to receive the names of gentlemen desirous of becoming subscribers.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

THE MEDICO-CHIRURGICAL SOCIETY

held its third meeting for the present session on Wednesday evening, the 7th instant, when subjects of more than ordinary interest were brought under the notice of the members. Dr. Begbie, the President, was in the chair.

REGISTRATION OF CAUSES OF DEATH.

Dr. W. T. Gairdner read a communication in illustration of a new plan for the registration of causes of deaths; and submitted a table of diseases, injuries, etc., which he had drawn up for that purpose. The subject had recently occupied much of the author's attention, and the practicability of the scheme he had introduced had, during some months, been tested by him in the superintendence of the pathological department of the Royal Infirmary. Dr. Gairdner appealed to the experience of the members of the Society as to the inaccuracy of the information on this subject, supplied by the Registrar-General's and other mortality Reports, and demonstrated how impossible it was, according to the system there pursued in the reporting of causes of death, to arrive at even tolerably correct results. The great deficiency in existing reports consists in the allowing only one cause of death to be assigned in the statistical tables. Thus, for example, dropsy is mentioned in many cases as the fatal disease, whereas unmentioned organic affections, it may be of the heart, kidneys, or liver, etc., preceded the dropsy, and led to it and the fatal issue. It is, indeed, taking a liberty with nature, to say that a man can only die of one disease! Dr. Gairdner further showed how in this manner the classifications of the causes of death, drawn up from the returns made by various practitioners, must necessarily want alike accuracy and interest. For, while the medical man (to use the same example) would select the dropsy as the cause of death, another, believing that the diseased heart had more to do with the fatal event than the dropsy, return it; and in the end neither of these correctly represented the case. The plan Dr. Gairdner proposed admitted, or rather encouraged, the return of several or many diseases, and that even in cases where one very efficient cause of death could be assigned. This, he believed, was the only way in which the accuracy of the individual returns could be secured; it was also clear, that, from the general record prepared from such returns, most interesting facts were capable of being arrived at, in regard to the association, etc., of organic and other diseases.

Dr. Gairdner's object in bringing this subject before the Society was, to obtain its approbation and countenance in carrying forward such a plan of registration of causes of death as he had detailed. It was by no means necessary for his purpose that all the medical men in Edinburgh, (though certainly the more the better,) or even all the members of the Society should determine to report the fatal events occurring in their respective practices. So many would do so, he felt sure, as to lead to most valuable nosological and pathological results. Dr. Gairdner suggested that, in the event of the approval of the Society being obtained, certain members should undertake the duties of registrars, and that from their records a general register should be drawn up and carefully kept. On the conclusion of Dr. Gairdner's paper, the President, Professors Alison and Christison, and Dr. Andrew, concurred in bearing testimony to the importance of the subject, to the necessity of a new system being adopted, and to the merits of the one proposed by Dr. Gairdner. Dr. Christison had himself been astonished at the inaccuracy of the results contained in the Registrar-General's Reports, more especially in connexion with the period of life in which deaths from phthisis are most common. Finally, the subject was referred to the Council, in order that immediate steps might be taken.

CASE OF ANEURISM OF THE SUBCLAVIAN ARTERY.

A few weeks ago Dr. Mackenzie, one of the acting surgeons in the Royal Infirmary, placed a ligature on the subclavian artery of the right side. The patient on whom this operation was performed was a young man who had been in the army, had served in the East, and had latterly led a very intemperate life. The operation was most skilfully performed, though unforeseen difficulties were encountered, chiefly from the number and large size of the veins lying in the immediate neighbourhood of the vessel. Immediately after the application of the ligature, the aneurismal swelling underwent a remarkable diminution. After a day or two, such an amount of bronchitis supervened as to demand the employment of severe remedies; and subsequent to the patient's recovery from the inflammatory affection of the chest, he suffered a hæmorrhage from the artery, a return of which was the cause of death. Dissection

discovered a most interesting condition, allying the case, in the opinion of the able surgeon who performed the operation, with a now celebrated case of the late Mr. Liston. There was found an abscess through which the artery passed, and with which, by an opening in its coats, the artery communicated. Such, at least, was the view taken by Dr. Mackenzie; not, however, before he had carefully investigated other opinions, which the *post-mortem* appearances, somewhat obscure, were, he admitted, capable of suggesting, viz., 1st, That the only disease was abscess,—an opinion the symptoms of the patient easily refuted; and, 2nd, That the presence of the pus (or the abscess) was the result of a degenerated aneurism. This view of the case gave rise to most interesting observations from the author of the paper, and from Professor Miller and Mr. Spence. The *quæstio vexata*, whether or not an abscess unconnected with the external atmosphere was capable of opening itself into an artery, received at the hands of these accomplished surgeons a thorough investigation, and was by all replied to in the affirmative. As to the treatment of such cases, supposing the diagnosis to be possible, there was little difference of opinion. Professor Miller contended, that one ligature on the cardiac side of the disease in the vessel should suffice, because the less liberty taken with the coats of an artery, already affected by ulceration and prone to more, the better. Dr. Mackenzie thought, on the contrary, that were another case to present itself, and such a diagnosis to be formed, he should treat it on the approved principles of surgery as regards false aneurism, and tie the vessel at two points; namely, above and below the disease.

GENERAL CORRESPONDENCE.

ALLEGED CASE OF POISONING.

[To the Editor of the Medical Times and Gazette.]

Sir,—I was called upon to visit a child on Sunday, December 14, about 11 a.m.; it was said to be in convulsions, but had never had convulsions before. Age, six weeks. Upon inquiry, I found the child had had a slight derangement of the bowels for the two or three previous days. A servant had been sent the night before to a person practising as a medical man, who, without seeing the child, sent a bottle of medicine, with directions that a teaspoonful should be given three times a day. At 10 p.m., on the Saturday, one teaspoonful of this mixture (which smelt and tasted as if it contained a large quantity of paregoric) was given to the child; in about an hour the child fell asleep and slept soundly for three hours; it had been very restless for two or three previous nights. About 2 a.m., (Sunday,) it awoke, and its mother noticed that its arms and legs were frequently stretched firmly out, so that she could not bend them without difficulty. The child continued restless, and moaned very much during the remainder of the night. At 6 a.m., it was given to the nurse, who took it to bed with her; at 9 a.m., the nurse noticed, for the first time, that the child was convulsed; she thought it was dying. I was not, however, sent for until 11 a.m. I found the child completely narcotised, and, to all appearance, at the point of death. Face pale; extremities nearly cold; head bathed with a cold perspiration, and clammy to the touch; pupil of the eye rigidly contracted, and quite insensible to light: pulse feeble and irregular, it could not be counted; the child had occasional convulsive twitching of the arms and hands, was comatose, and gasping for breath. A mustard cataplasm was applied over the whole of the chest and abdomen, and a few drops of brandy, with an equal quantity of water, given to the child. These remedies produced no perceptible effect, and in from about twenty minutes to half an hour after I first saw the child, it was, to all outward appearance, dead; the pulse at the wrist had ceased to beat; no motion of the heart could be perceived; the child ceased to breathe; and the pupil of the eye, which had been, whilst any appearance of life remained, rigidly contracted, regained its natural appearance, but was equally insensible to the action of light whether contracted or dilated. I pronounced the child dead, and it continued, to all outward appearance, dead, for at least ten minutes or a quarter of an hour; when, as I was turning round to leave the room, having been occupied in making inquiries and in sealing up the bottles of medicine, I heard a slight cry, and, upon again examining the child, found the pupil again contracted, and the pulsation at the wrist again perceptible. The child shortly afterwards breathed audibly, and presented other signs of life. About one hour after the mustard plaster had been applied, the surface of the skin began to redden, and other symptoms of re-action came on; the pupil of the eye was not quite so insensible to the action of light, and a few drops of solution of sesquicarbonate of ammonia and brandy being occasionally given, and at intervals a little strong infusion of coffee, the child breathed easily. These signs of re-action continued for about a quarter of an hour, when the redness of the skin disappeared, although the mustard had not been removed, coma came on, and the child gradually sank, appearing at intervals, varying from one to five minutes, quite dead, and then again showing signs of life for a short time. The child died about six hours after I had first seen it. Nature appeared to make every effort to combat the effects of the large dose of narcotic poison it was evidently labouring under. I was informed that, with the exception of an occasional dose of a few drops of a proprietary medicine, (infant's preservative,) which had been given to it once or twice a day, during the last two days, it had had no other medicine than that given to it at 10 o'clock p.m. on the night preceding its death. Also, that the child (which appeared a strong, well-formed child) had never taken any other food than from the mother's breast.

Inspection of Body Twenty-two Hours and a Half after Death.—External appearances:—Face pale, pupils natural, medium contraction, venous mottling of the skin, particularly the back, upon which it had lain since death, also about the hips and thighs. Thumbs and fingers rigidly contracted; toes not contracted. Abdomen distended with flatus; when opened, containing two or three drachms of straw-coloured serum, perfectly healthy. Bladder empty and contracted. Heart healthy; the ventricles containing a clot of blood. Upon opening the large vessels about the heart and liver, an abundant flow of dark liquid blood took place. Thorax contents perfectly healthy. Larynx and trachea perfectly healthy. Brain and cerebellum healthy: the vessels upon the anterior surface of the brain were slightly turgid with fluid blood; the posterior and depending portions much more so: a few bloody spots were observed upon cutting into the substance of the brain. Gums normal; the stomach and intestines were not opened, but were placed together, with the entire contents of the thorax and abdomen, and portions of the brain, in a jar, which was sealed up in the presence of Mr. Hunt, a surgeon, present with me during the inspection; and policeman Sullivan, No. 369, and removed from the house for the purpose of a more careful and minute inspection, the Coroner having promised to adjourn the inquest for that purpose, should it appear necessary to do so. An inquest was held upon the 16th inst., before I had had time to make this examination of the stomach, intestines, etc., and their contents, and a verdict returned under the direction of the Coroner, to the effect, "that deceased had died in consequence of the presence of a clot of blood in the heart, but that there was no evidence to show how this had been occasioned." I had stated in evidence my opinion, that the deceased's death had been occasioned by a narcotic poison, and that that poison was probably opium; and that further inquiry and analysis of the bottles containing medicine, were necessary to prove this opinion.

Examination of Portions of Body Resumed after Inquest.—Dec. 17, 8 p.m.—Sealed jar opened in the presence of Mr. Calvert, Professor of Chemistry to the Manchester Royal Institution. The portion of brain had been separated from the contents of the abdomen and thorax by means of paper, and placed at the top of the jar; the upper surface of this paper was covered with fluid blood, and one or two slight coagula; it became perceptibly brighter upon exposure to the atmosphere; the portions of brain also were covered with blood, which had apparently exuded from its substance, the under surface of the paper and the intestines not being at all bloody. Upon dividing the brain with a scalpel, what appeared to be slight streaks of blood were observed; several of these being examined with a microscope, they were found to consist of small, highly vascular portions of the pia mater and arachnoid membranes.

Continued Examination of Contents of Abdomen, in the presence of Mr. Hunt, at the Royal Institution, Dec. 18, 1851.—The stomach, upon being opened, was found to contain a small quantity of a matter resembling thick mucus; the mucous membrane healthy. Duodenum nearly empty; mucous membrane healthy. The jejunum contained a small quantity of thick, yellowish-brown matter, mixed with mucus; the mucous membrane in contact with this matter was slightly reddened in patches, and a considerable number of the mesenteric glands corresponding with this portion of the jejunum enlarged and indurated, but not approaching suppuration, the largest being about the size of a horse-bean. The remaining portions of the small and large intestines, and their contents, normal. Liver, pancreas, spleen, and kidneys, when cut into, were perfectly healthy.

I am, &c. Alfred Carr, M.D.,
Late Surgeon Superintendent of Emigrants, &c.

Rusholme, Manchester.

[After having maturely considered the subject, we have come to the conclusion not to publish the particulars of the inquest so

kindly forwarded to us by Dr Carr. The motives that influenced us in coming to this decision are the following:—

1st. The subject does not belong specially to a medical journal. The questions between Dr. Carr and the Coroner, and Dr. Carr and Mr. Trafford, seem to us questions of law, and on these the Secretary of State has decided.

2ndly. The gentleman who supplied the medicine which Dr. Carr supposes, from taste and smell, (most fallacious guides,) to have contained the agent by which the child's death was in his opinion caused, is a member of the College of Surgeons, and, therefore, we suppose, a qualified, if not a licensed man; *i.e.*, he has all the legal qualification to practise his profession possessed by any of the surgeons to the Metropolitan hospitals.

3rdly. We are by no means satisfied from the symptoms and pathological appearances that the child died from the effects of a narcotic poison; but, supposing it to be so, still we think it is not for us to hunt out facts, the existence of which the Coroner and the magistrates ignore, in order to bring discredit on a member of our Profession.—Ed. *Medical Times and Gazette.*]

MR. SYME'S ORIGINALITY.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the *Medical Times* for the 13th of December last, with reference to the operation which I have proposed for the remedy of obstinate stricture of the urethra, it was stated: "He (Mr. Syme) has the merit of having revived,' with' others, an operation which, some few years ago, received condemnation as dangerous and unfit for general performance." In the following number of the Journal you published a letter from me, requesting to be informed when, where, and by whom the operation was performed before I proposed it; and to this you replied: "If Mr. Syme reads French, he will find the account of the incision *extérieure* or *boutonnière* in Malgaigne's 'Manuel de Médecine Opérative,' p. 651;'" the following being, I presume, the passage to which you refer: "A grooved staff or catheter is carried down to the obstruction and held there by an assistant. The surgeon then makes a long incision over the lower surface of the urethra, and cuts upon the conducting instrument, which, at the same time, is slightly withdrawn. He next searches for the continuation of the canal at the bottom of the wound, the patient at the same time trying to make water, and endeavours to introduce, where he sees it flow, a director or probe to guide his incision through the remaining part of the stricture. A catheter is then placed in the bladder, and allowed to remain until the wound is healed."

But, as the procedure here described is only applicable to the remedy of *impermeable* strictures, of which I deny the existence, it can have no reference to my operation, which requires permeability as an essential requisite for its performance. It is, in fact, the old operation performed by Hunter, Pearson, Cooper, and the present hospital surgeons of London, which I have not scrupled to represent as unnecessary, uncertain, and in the highest degree dangerous. As, therefore, you have not answered my question, I must again beg to request that you will state explicitly when, where, and by whom my operation was performed before I proposed it.

Edinburgh. I am, &c. James Syme.

[We really do not see why our time is to be occupied in quoting, for the sole instruction of Mr. Syme, passages from authors, with whom he should be as familiar as ourselves.

However, as Mr. Syme, dissatisfied with our reference to Malgaigne, again "*begs to request* that we will state explicitly when, where, and by whom HIS (?) operation was performed before he proposed it," we extract the following passage from the Surgical Works of P. J. Desault, edited by Bichat—1803:—

"It is difficult to form an exact idea of the operation of '*la boutonnière*' from the writings of authors, either ancient or modern. It was practised in so many different ways, and the operative proceedings offered so much contrariety and so little resemblance, that it is impossible to regard the subject in any general point of view." . . . .

"The same mode of proceeding is not always followed in performing '*la boutonnière*' upon the canal of the urethra. *When a catheter can be introduced into the bladder, this instrument is used that the incision into the canal may be made upon its groove, and that it may conduct a gorget, which will serve to facilitate the introduction of the canula, which is to remain in the bladder.* Here the operation presents no more difficulties, nor any more danger, than the incision for '*la taille au grand appareil*,'—'lithotomy with the great apparatus;' but then it offers no advantages in the treatment of retention of urine, for, *since a catheter can be introduced, it is also possible to pass a sound, which would serve for the evacuation of the urine, and to re-establish, by its presence, the free passage of the canal.* When we cannot succeed in introducing the catheter, the operation becomes much more embarrassing," etc, etc.—*Œuvres Chirurgicales*, de P. J. Desault. A Paris, chez Méguignon l'Ainé, Libraire, Rue de l'Ecole de Médecine. An. xi. 1803. Tome III., p. 330.

And now, *we* "beg to request" Mr. Syme that he will reply to our question, asked with no ill feeling towards himself, but solely in the cause of truth,—Does he still call himself the originator of the "*Incision exterieure?*" He would almost seem to be the Wandering Jew of surgery, who, having lived and operated before Bichât, Desault, and others, now favours us with a course of publications upon surgical reminiscences. The truth, however, is, that the self-sufficiency of Mr. Syme, the *soi-disant* "one pure surgeon" of Scotland, is too great to permit him to refer to the labours of others; and, possessing some inventive powers, he appropriates to himself that which is not his own—not from any dishonesty, but through ignorance. Thus, "Mr. Syme's lip operation," described and acknowledged by Mr. Lawrence in our Journal of the 3rd January, is that of Serre, of Montpelier. (*Traité sur l'Art de Restaurer les Deformites de la Face.* Paris, 1842.) It is also described by Blasius, (*Klinischen Zeitschrift. Halle.* 1836) and by Dieffenbach, (*Handbuch der Plastischen Chirurgie.* Berlin, 1838.) To these writers we refer our readers. Plagiary does not alone consist in copying, without due acknowledgment, men's modes of action or methods of speech. It is quite as much a literary theft to avail ourselves, without stating their origin, of the principles and ideas of others; and that, although we may not walk exactly in their paths, nor use their identical words.—Ed. *Med. Times and Gazette.*]

STATISTICS OF GASTROTOMY.

[To the Editor of the Medical Times and Gazette.]

Sir,—I by no means wish to intrude useless remarks upon your valuable space, especially with reference to so unsatisfactory a subject, at the present time, as the surgical treatment of ovarian dropsy; still, if they have not yet been noticed, I think the following errors should be at once corrected, especially as they are prominently put forward in the standard work on surgery of our time, "South's Edition of Chelius."

As regards the results of operative interference by the knife, South quotes T. Safford Lee as stating, that—

—	Deaths.	Recoveries.	Average.	—
Of all Cases—108 ...	39	69	1 to 3 recoveries, nearly.	This average should be: Death 1 in $2\frac{1}{4}$ operations, or 3 nearly.
Of those Performed with Fair Chance—84	31	53	1 to $2\frac{23}{31}$ recoveries.	1 in $2\frac{23}{31}$ operations.
Of all, by long incision—79	34	45	1 to $2\frac{11}{34}$ recoveries.	1 in $2\frac{11}{34}$ operations.
Of all, by short incision—28	4	19	1 to $5\frac{3}{4}$ recoveries.	1 in $5\frac{3}{4}$ operations.

On referring to Lee's own work on the subject, I find that he,

in speaking of the long incision, says, the mortality is 1 in 3; this should be 1 in 2½.

In the note, p. 207, he says, I died to $2\frac{4}{5}$ recoveries; this should be, I died in $2\frac{4}{5}$ operations.

In his Appendix his numbers give the average I death in 2½ operations.

His statement of the success of the short incision is correct, as 1 death in 6 (nearly) operations. I am, &c. SCEPTIC.

MARCH OF DEATH IN ST. GILES'S.

[To the Editor of the Medical Times and Gazette.]

SIR,—With your permission, I will make a few observations on Dr. King's "March of Death in St. Giles's." 1st. The conclusions arrived at now, and consequently all subsequent data to be formed by Dr. King from the Tables he has constructed, being based on the deaths alone, and not on the amount of disease engendered, they will afford but a very limited amount of information towards the solution of the great questions—the causes, the nature, and the sources of epidemic disease. Every practitioner must, even with the limited experience of a few years, be able to call to mind the fact, that sometimes an infectious disease may be unusually prevalent, but with little mortality; at others, without an extensive prevalence, the same disease may be exceedingly fatal. Now, this fact alone shows, that the epidemic cause or agent must be studied, not only in its death-inducing, but in its disease-engendering effects. The "March of Death" will furnish its lessons and its facts that cannot fail to be useful and instructive; but it must be among disease in the living, both in man and the brute, that we must seek for the nature and causes of epidemics.

2nd. I cannot help regarding the conclusion of Dr. King's paper in this day's Journal as a most unsatisfactory and incoclusive summing up, considering the amount of material from which he has had to draw. Let me quote the Doctor's last words:—"The illustrations—Lincoln's-inn-fields and Dudley-street—demonstrate that measles falls in isolated groups, and thus follows the law of cholera and scarlet fever. This fact, together with the strict adherence of measles to its own locality,—a locality totally different from that of cholera and scarlet fever,—tend still further to strengthen the gaseous, and to weaken, if not destroy, the contagious theory attached to these three forms of disease." Are we to understand by this, that Dr. King denies the contagiousness of measles and scarlet fever? Surely this cannot be, since contagion has been incontestably proved, both in measles and scarlet fever, by inoculation. I take it therefore for granted, that the words "gaseous" and "contagious," as used by Dr. King, have significations which the words themselves do not convey to an ordinary reader. I believe with Professor Sewell, that "the association of accurate definitions with our words is of even greater importance than the association of facts." And it is with this impression on my mind, that I have taken the liberty of offering a few comments on "the March of Death in St. Giles's."—I am, &c.,

INQUISITOR.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

Dr. MURPHY, President, in the Chair.

The President announced the donation of the bust of the late Sir Astley Cooper by Mr. Cocke, of Guy's Hospital, and also of the bust of Dr. Babington, presented to the Society by Mr. Stedman.

ON PLACING MEDICINES ON THE TONGUE.

A paper by Mr. Wardrop, "On the Benefits that may be derived from placing Medicinal Substances on the Tongue, instead of into the Stomach," was read. He observed, that there are many circumstances which might be mentioned, in order to show the influence which some medicinal substances have on the animal economy, when they are placed on the surface of the tongue. A gentleman subject to bilious headache, for which he was accustomed to take small doses of calomel, repeatedly found a distinct difference in the length of time which the calomel required to relieve the headache, according as it had been taken in the form of powder on the tongue, or of pill into the stomach. In another case, the difference of the effect of swallowing a bolus, pil. aloes e. myrrhâ, or allowing it to dissolve in the mouth, was considerable. When taken into the stomach, it always created a good deal of pain throughout the alimentary canal, and the evacuations were irregular; but, when dissolved in the mouth, no other sensible effect was produced than one natural evacuation. Experience showed Mr. Wardrop that this principle applied to other drugs; and he explained it thus: the tongue possesses an abundant supply of absorbents, by which the drugs are carried directly into the venous circulation; whereas medicines, taken into the stomach, are necessarily mixed with the food, so that a more lengthened period must be required to separate them.

ULCER OF THE STOMACH.

Dr. Routh exhibited the stomach, part of the uterus, and left ovary of a patient,—M. E., aged 33, unmarried, who had died from profuse hæmatemesis. Her illness had extended over a period of seven years. When seen by Dr. Routh, her symptoms were those of marked gastrodynia, only that the acute pain, referred to the left submammary region, was relieved by cold, and increased by warm drinks. This circumstance, together with the fact, that on two occasions she had suffered from hæmatemesis and melæna, led him to diagnose an ulcer of the stomach. There was also copious leucorrhœa and pain in the back, which led him to suspect uterine disease, but she would not submit to an examination. He had prescribed the usual remedies with but little amendment. She had subsequently been under Dr. C. J. Hare's care, who had confirmed his (Dr. Routh's) diagnosis. Till within a week back, she continued sometimes better, and sometimes worse, when she was seized with profuse hæmatemesis. Mr. Adams then attended her, but she died in a few days. The *post-mortem* was made two days after death by his colleague, Dr. Taylor. The lining membrane of the stomach, towards the pylorus, was much congested or stained. In the lesser cul de sac, about two inches from the cardiac orifice, was an ulcer about the size of a shilling, excavated, looking as if a piece of mucous membrane had been punched out, in the centre of which was a small aperture, about the size of a pin's head, opening directly into the artery. The stomach was half full of grumous black blood. The uterus was pretty large, especially its cavity, with a small clot within it, and attached to the left border of it by a pedicle. Close to the opening of the left Fallopian duct was a small polypus, about the size of a haricot bean, very red and firm. Both ovaries were diseased. Several Graafian vesicles were enlarged, and there were several cysts. In the left ovary there was besides, near the edge, a black gangrenous looking irregular cavity, such as would contain a pea, but it was free from odour. The cavity was covered in by a firm thick capsule. The kidneys were large; the other viscera healthy. Dr. Routh remarked, that, although at different periods of her illness, this patient had been so emaciated, as to lead to a suspicion that phthisis co-existed, yet, at the period of her death, excepting in the size of the breasts, which were shrivelled up, she was tolerably *embonpoint*. The catamenia had been at times profuse; but she had been regular up to a fortnight before death.

Dr. Hare remembered the case described by Dr. Routh. The woman was under his care at the Marylebone Dispensary about two or three years ago. She was labouring under a third attack of hæmatemesis at that time. He was inclined to think the ulcer was one of those occasionally met with in young women between 18 and 30 years of age; they may come on without any pain, the first symptom indicative of their presence being the profuse hæmatemesis. He remembered another case at the dispensary, who, having previously appeared to be well, but pale and anæmic, suddenly had profuse hæmatemesis, and shortly sank.

Mr. Dampier inquired if death had occurred suddenly in Dr. Routh's patient.

Dr. Routh replied in the negative; the last illness continued about a week.

Mr. Dampier recollected the case of a young woman—a housemaid, who, while apparently in good health, was stooping to lift a fender, when she felt something give way in the abdomen. She was immediately seized with the most intense agony, and sank the same evening. The autopsy showed perforation of the stomach. He (Mr. Dampier) had met with several such cases, and in all death was sudden.

EXTENSIVE WOUND OF THE THROAT—DEATH.

Dr. W. Burke Ryan exhibited the pharynx and larynx of a suicide. He was called at ten minutes to ten on the night of Tuesday, January 6, to see H. T., who had cut his throat, and on his arrival found Mr. Wall examining the wound. The wound was gaping, five inches in length and opening fully into the bag of the pharynx, the posterior wall of which was also divided. The os hyoides was wholly separated from the thyroid cartilage. The fingernail could be placed directly upon a rough cut in one of the cervical vertebræ. The larynx was seen to rise and fall during respiration. The wound extended nearly from angle to angle of the inferior maxillary bone. The carotid of the right side and its pulsations

were quite visible; the left could be felt pulsating by placing a finger within the wound. The wound was a hideous chasm. The epiglottis was cut off. There had apparently been smart hæmorrhage, but the oozing was not very considerable when Dr. Ryan arrived; this, apparently venous, was lessened by a piece of linen dipped in cold water. The patient was a strong, powerful man, aged 31; he was quite conscious, the eye and face calm, pulse regular and small. Failing in an attempt to speak to his wife, he shook his head deprecatingly. The lips of the wound were approximated, and he articulated his forgiveness, requesting hers. Quarter to Twelve.—Pulse gradually weaker, and occasionally not perceptible at the wrist. Occasional coughing and vomiting of blood, which had oozed into the trachea and stomach. On again closing the wound he used the word "evacuate." We now let him express his wants in writing, which he did with ease, and quite collectedly; wrote his forgiveness of every person, and that he had been "wrongly accused," this ruling idea being still "strong in death." Wednesday, Half-past Twelve a.m. —The head has been kept bent on the chest in the semi-recumbent position. Twenty-five minutes past One.—Breathing hurried and laborious, accompanied with a short, quick, and repeated "Oh! oh!"—the sound coming from the wound. Restless. A wet cloth was occasionally placed to his throat, when he could articulate more freely, "Oh! oh!" "Oh dear!" Quarter to Two. —Nostrils dilated. Getting still more restless,—"Let me die." "Water!" A little water was swallowed with an effort; but brandy greatly irritated the glottis. He wished to spit out, but could not do so, and removed the saliva with a cloth. The halitus quite visible from the wound. Half-past Four.—Pulse weak, quick, compressible, small; strugglings increasing in severity. Half-past Five.—Breathing most difficult; mouth open; lips pallid; air entering almost wholly by wound. Twenty minutes past Six.—Last gasp. Dr. Ryan removed the parts now exhibited. Two ineffectual incisions were found on the upper part of the thyroid cartilage, and, unable to find an entry here, the suicide was more successful by rounding the corner of the thyroid, going completely through the thyro-hyoid ligament, severing all connexion between them, and cutting through the posterior part of the pharynx, which, retracting, left a space the size of a shilling where the vertebræ were exposed. Across the upper part of this space one shred of fascia remained, dividing it into two unequal parts. In the lower division, on the body of the fourth vertebra, were two cuts—the bone being quite roughened by one of them; and in the upper division was another cut into the inter-vertebral cartilage between the third and fourth vertebræ. The gash came upon without wounding the sterno-mastoid of each side. Several cutaneous veins were divided, the jugulars themselves not being opened. The internal jugulars undivided, the superior thyroid branch on right side divided, that on the left intact. The sheath of the vessels, though quite exposed, was untouched; the descendens noni nerve running its usual course. The superior laryngeal nerve, with its accompanying artery, untouched on each side, the cut going immediately above the thyro-hyoid foramen in the ligament by which they pass; left superior laryngeal artery cut across. The os hyoides was so completely divided from the thyroid cartilage that there seemed no connexion between them but the mucous membrane and constrictor fibres lying by the sheath of the vessels, and the depressors of the former being completely cut through it was tightly drawn up close under the chin by its powerful elevators, carrying with it the entire epiglottis. One may wonder at the possibility of a wound of this sort without the large vessels being wounded; and had the occurrence taken place in a lonely dwelling, where no third party was present, it might have become a serious question — particularly under domestic dissensions — whether the wound were self-inflicted, as its extent, etc., would argue a determination of purpose and strength of wrist which falls to the lot of few. The man's character was that of a mild, kind, and inoffensive person; much liked by the workmen over whom he was foreman.

Mr. Canton asked Dr. Ryan his reasons for sewing up so extensive a wound. He thought it was generally considered best to leave the wound open and gaping, its extent and the amount of suppuration and of other discharges, together with the interference with vocalisation, being taken into account.

Dr. Ryan remarked that the extreme ends of the wound only were sewn up, and even that was contrary to his wish, and in deference only to the opinions of other surgeons in attendance. The centre of the wound was not interfered with.

ON EXCISION OF JOINTS.

Mr. Hancock commenced by giving an account of three cases in which he had performed the operation of excision,—one at the shoulder, a second at the elbow, and the third at the ankle-joint. He next alluded to the objections which have been urged against the operation for excision of joints,—viz., extreme suppuration,—the formation of sinuses, and consequent difficulty of healing, with constitutional disturbance,—the shock to the patient,—and, lastly, those recently adduced by Mr. Gay,—the inutility of the operation, and its unphilosophical character as a mode of operating for diseased joints. Mr. Hancock alleges that the degree of suppuration does not influence the patient so much as the character of the discharge. A patient with diseased joint, discharging but little, but that little of a morbid and unhealthy character, will suffer from extreme constitutional disturbance. Remove the diseased parts, and let the subsequent discharge be ever so profuse, so long as it is not actually of a morbid character, the constitutional symptoms will subside, and the patient will gradually acquire strength and flesh. This is accounted for when we consider, that in the one instance there is a morbid action going on in diseased structures, producing unhealthy pus, while in the other the process is one of reparation, giving rise to healthy though profuse suppuration; that sinuses do not form so readily after these operations as has been imagined; and that when they do occur, they are more attributable to bad management and bad dressing, than to the nature of the case. He denies that the shock is greater than that attending an ordinary case of amputation. That with regard to Mr. Gay's objections, Mr. Hancock observes, that the operation of resection is not a useless operation, is proved by the cases just related, as well as those published from time to time by Messrs. Syme, Fergusson, and others; and that it is not unphilosophical, is also amply proved by the fact of its being an operation of preservation, and a substitute for amputation; and that a surgeon is not compelled to remove sound parts. He denied that the parts were usually in the condition asserted by Mr. Gay, when the operation for resection was performed. He would refer to three of the preparations upon the table, which clearly demonstrate, that although the disease shall be sufficient to destroy the patient, the state of parts will admit of the entire removal of the morbid structures by the operation of resection. If the question at issue rested simply between incising and excising joints, he would not for one instant deny the superiority of the former over the latter proceeding; but in those cases, the selection is between amputation of the limb and excision of the joint, or leaving the patient to die. Mr. Gay limits his method to those cases where the articulations are completely destroyed; and while Mr. Hancock admits that Mr. Gay has done good service in directing attention to this plan, he would observe, that when reduced to this condition, the parts can scarcely be regarded as joints; while in a large proportion of cases requiring amputation or excision, the destruction of parts has not attained this state; that the necessity for such operations does not depend so much upon the extent of destruction as upon the degree of constitutional disturbance attending the progress of such disorganization; for in many instances the severity of the constitutional symptoms has necessitated amputation where the degree of disorganization has been comparatively slight, proving that the urgency of cases depends upon the powers of endurance in the patient, rather than upon the actual extent of disease or destruction of parts; so that while he readily admitted, that when completely disorganized—when the cartilages were entirely denuded and destroyed—incisions into the joint might prove of avail, he would urge, that in an equal, if not in a more numerous class of cases, the irritation produced by the progressing morbid changes is so excessive, that we cannot depend upon such simple means, but are forced to have recourse to the more decided plan of either amputation or excision.

Mr. Gay observed, that the success of an operation, *per se*, could not be held to be any fair test of its value, or amputation in cases of membral aneurism might still be held in as high esteem as the more modern practice of the ligature or tourniquet. But Mr. Gay did not think that the cases of excision made out so good a statement in favour of this operation as it had been generally supposed to do. From a very elaborate and interesting paper by Mr. Blackburn, in the Guy's Hospital Reports, it appeared, that in cases of excision of the shoulder joint 5 were successful, 3 fatal; ditto elbow, 29 successful, 3 fatal; 11 knee, 5 successful, but with very protracted and tedious recoveries; 5 fatal, 1 partially failed. According to Mr. Norman, the successful cases of knee-joint excision have been only as 1 to 4. In cases of hip-joint, according to Mr. Haynes Walton, of 12 cases of excision of the head of the bone, 6 only were successful; the remaining 6 died. Mr. Blackburn concludes, from his review of cases, and very justly, that the operation is admissible in the shoulder and elbow; of doubtful utility in the ankle; and inadmissible, except under very peculiar circumstances, in the wrist and knee. It would appear that, in the cases of elbow-joint excision, the results were most satisfactory.

Of the 14 cases recorded in Mr. Syme's treatise of excision of the elbow-joint, in 6 the recovery took from three to six months and more to accomplish; in 1 the cure was rapid, but Mr. Syme heard a rumour of the disease having subsequently returned; in 1 the cure was rapid, but disease recurred in the wrist, and the limb was amputated above the new joint; in another case, the recovery was rapid, but an extremely obstinate ulcer subsequently formed in the cicatrix of the wound; in another, amputation and death followed the operation; in another, death took place within six weeks; while in three only does the cure appear to have been accomplished with rapidity,—*i. e.*, within the space of three months. Mr. Gay could not think this a favourable result. The real value of the operation is as a substitute for amputation, while it is often regarded as a substitute for the employment of remedies which are known to be adapted to the various kinds of diseases for which this operation is had recourse to. This is one objection Mr. Gay urged. The second objection was, that it has been employed indiscriminately in all innocent affections of the joints, without any regard to their cause, nature, or complications. In one of Mr. Hancock's cases on the table, a mere sequestrum is to be seen in the articular end of the humerus, which appears to have communicated externally by means of a cloaca and sinus, the joint itself being free from disease. A removal of the sequestrum would, in Mr. Gay's opinion, have sufficed for the recovery of the patient. Another objection lies in the fact, that the ends of all the bones constituting a joint are taken away. Mr. Syme regards it as necessary to take away the cartilages in re-section; but, in order to do that, the bone is also removed. From Mr. Syme's work, it would appear, that in those cases in which this was done, the cure was as protracted as in that case in which it was neglected; and, according to Mr. Gay's experience, where disease of bone is of a secondary character, and not influenced by any constitutional taint, it always repairs itself after the primary disease has been removed. A further objection, Mr. Gay urged, arose from the tendency of caries, when of a constitutional origin, to run along the cancellous structure of the bone to a distance that cannot be estimated before the operation. It must be remembered that the joint, when affected by the diseases alluded to, is not in the same condition as in the earlier stages, when cutting into it would be not only useless, but attended with great risk. At this period, the joint is in fact a large abscess having its walls in various conditions of disease. His (Mr. Gay's) purpose in making these remarks, was to invite inquiry, with the object of improving our knowledge in the class of diseases alluded to. Mr. Gay adverted to his means of treatment by incision, adding, that by such an opening as he recommended, the interior of the joint might at all times be explored; and, when a limited portion of carious bone, or a cartilage, or a sequestrum, kept up the disease, then it might be removed, and all diseased symptoms would gradually subside. Mr. Gay concluded by a well-deserved eulogy on Mr. Hancock's excellent and valuable paper.

Mr. Hird observed, that Mr. Hancock's paper had been conclusive to his mind. Mr. Gay had raised several objections to the operation advocated by the latter; the first being, that it is unphilosophical. What is the test of this want of philosophy? His own impression was, that if, in certain cases of disease, nature is unable to repair the injury that has been inflicted, and, after the operation of excision, the patient is able so to use the part as to gain his livelihood, then that operation is both philosophical and practically useful. Mr. Hancock's paper was eminently practical. Could nature in these cases have done what Mr. Hancock had? He (Mr. Hird) believed not. Mr. Gay had said, that the operation was successful in cases of diseased elbow-joint, but not in similar disease affecting the hip; but in the latter case, it must be remembered that excision of the joint could not be practised. The head of the femur alone could be removed, and the acetabulum was very often the real seat of the disease. It was also said that, in cases of diseased bone at a distance from a joint, he cut down upon it, and remove the disorganised structure; and he proposed to do the same in instances of diseased joints. Such a proposal, he thought, entitled Mr. Gay to great credit if experience should fully confirm his views by success; but at present more proof was wanted.

Mr. Canton said, he thought the question before the Society was, whether amputation, excision, or incision of joints should be practised in the cases then under their notice. On a former occasion he had advocated Mr. Gay's plan of treating his cases, because the condition of the patient was not such as to endanger life; but in Mr. Hancock's cases it appeared, that life would have been inevitably sacrificed if excision had not been immediately practised. In the first case, that of traumatic disease of the shoulder, the head of the humerus only was removed, and the glenoid cavity was saved. In the second, that of the elbow, the patient was greatly reduced, and the only chance that remained for him was excision of the joint. In this instance the patient did well. In the third case, the disease in which, Mr. Gay says, is often secondary, the joint was scrofulous. He would say of this case, that the scrofulous disease had settled in the ankle, where it was eliminated; and, then, by an operation, the surgeon, to use a common phrase, had, as it were, *dodged* nature by its removal. He thought Mr. Gay had done good service to surgery by recommending the incision in certain cases where all the textures of the joint are destroyed,—when it is in fact no longer a joint, and nothing remains but to induce anchylosis, but such were not cases similar to those described by Mr. Hancock. He had seen the head of the femur removed on two or three occasions, but the acetabulum was not interfered with. One or two patients died.

Mr. Rogers Harrison thought, that Mr. Gay's operation might be adopted when life is not endangered; but when the vital powers are nearly exhausted, excision must be had recourse to.

Mr. Dendy was of opinion that both authors were in the right. The grand error consisted in taking an abstract view of such cases. There was no doubt Mr. Gay had done good service to surgery by adopting what he calls a preliminary operation. After the reading of Mr. Hancock's cases, he must say, that the last-named, those requiring amputation, were rarely to be met with. The principle of Mr. Gay's operation was similar to cutting down upon an abscess, the joint being disorganised with altered cartilage keeping up irritation.

Mr. Canton inquired in what manner Mr. Dendy would diagnose between the cases requiring the incision, and those needing excision of the joint?

Mr. Dendy would say, that when the joint had been cut into, and it was found impossible to remove all the diseased structures without excision, then the other operation should be practised.

Mr. Hancock remarked in reply, that he had merely intended to defend excision of the joints against the objections Mr. Gay had urged against it, especially as Mr. Gay must be regarded as a great authority upon these matters. He thought Mr. Gay's researches, if followed up, would be liable to have the worst tendency respecting it. Excision, Mr. Gay says, is unphilosophical and useless; but what does he propose instead? Examine these cases: there is an extensive disease, the patient hectic, pulse at 100, and short expectorating cough, with profuse night sweats. Is this state to be increased by a large incision into the joint, or to be removed by its excision, by doing that which presents the more certain hope of cure? He (Mr. Hancock) knew from experience that incision of joints has been the means of saving many valuable limbs. The necessity for excision does not depend so much on the extent of the local disease, as on the degree of exhaustion of the constitution, and of the patient's capability of bearing up against the disease.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 9th inst.:—

Ayliffe, Henry, South Australia.
Alder, Sydney, Wakefield, Yorkshire.
Bell, William Thomas, Great Grimsby, Lincolnshire.
Boor, Leonard George, St. George-street, East.
Brodrent, William Henry, Manchester.
Donson, William Coyle, London.
Gray, Andrew Sexton, Dublin.
Harle, Thomas William, Bishopstortford, Herts.
Liddon, Edward, Colyton, Devon.
Ingram, William George Lloyd, Midhurst, Sussex.
Rice, Bernard, Stratford-on-Avon, Warwickshire.
Swete, Edward Horatio, Bristol.
Williams, Aldborough Lloyd, St. Helier's, Jersey.

College Fellowship.—The next classical and mathematical examination for the Fellowship of the College will take place during the first week in March, the subject of which will be found in our advertising columns. The next professional examination for the distinction will take place in April next.

Military Appointments.—Rifle Brigade—Assistant-surgeon Henry Shearly Sanders, from the staff, to be Assistant-Surgeon Hospital Staff; Acting Assistant-Surgeon John Henry Within, to be assistant-surgeon to the Forces, vice Sanders, appointed to the Rifle Brigade.

Naval Appointments.—Surgeon John Gallacher (1846) to the Arrogant, 36, screw steam-frigate, at Lisbon. Acting Assist-

ant-Surgeon David Wilson (1852) to the Victory, flag-ship, at Portsmouth.

Obituary.—On the 3rd instant, James W. Fullerton, Esq, aged 37, surgeon of the Amazon, Royal Mail steam ship. Mr Treweeke, the second officer of the Amazon, also lost, is stated in one of the newspapers to have been a surgeon originally, and several of the other officers were the sons of medical men.

Medical and Chirurgical Society, Jan. 13, 1852.—The following gentlemen were proposed as Fellows of the Society:—Alfred Baker, Esq; William Davies, M.D.; John Roberts, M.D.; Sherard Freeman Statham, Esq.; Henry Thompson, Esq; John Wiblin, Esq.; William Adams, Esq., and Daniel Wane, M.D., were admitted as Fellows of the Society.—At the next meeting of the Society, the following gentlemen will be balloted for, Jan. 27:—Charles Case Smith, Esq.; John Cooper Forster, Esq.; George Canney, Esq.; George Borlase Childs, Esq; John Edward Stephens, M.D.

King's College Hospital.—At the last meeting of the Committee of Management of this hospital a letter was read from Mr. W. H. C. Plowden, one of the Directors of the East India Company, announcing his intention of placing at the disposal of that body the appointment of an assistant-surgeon in the Company's Service, to be conferred on one of the students of the hospital, who is to be selected for his professional merits and his correct and gentlemanlike conduct. Such a noble and judicious exercise of patronage reflects credit, not only on Mr. Plowden, but also on the Institution which he has thought worthy of his bounty. Were the disposers of the patronage of the East India Company to adopt a course like this more frequently, the result in a few years would be most favourable to the Service, and would exercise a beneficial influence on medical science in India, by introducing into it a number of highly-educated young men selected for the appointments specially for their diligence, industry, and medical attainments.

Ethnological Society.—Dr. W. F. Daniell read a most interesting and elaborate paper on the Ethnography of Accra, West Coast of Africa, before the members of this Society, on Wednesday last, an abstract of which we hope shortly to lay before our readers.

Gresham Lectures.—Dr. H. H. Southey, F.R.S., delivered his two lectures on Physic, as usual, in the theatre of the Gresham Institution, Basinghall-street, on Wednesday and Thursday last, the 14th and 15th inst. The whole of the Gresham Lectures are delivered to the public gratuitously.

Seaman's Hospital Society.—The quarterly court of the governors of this Institution was held on Monday. The report stated that the number of patients admitted into the hospital ship Dreadnought, from the 1st of October to the 31st of December, 1851, was 768, of whom 155 were still under medical treatment; 2 were convalescent; 3 fit for duty; and 608 had been discharged. The number received since the first establishment of the hospital in 1821, was 65,373. The number of out-patients for the last quarter amounted to 372.

At a meeting of the Medical Profession of Hull and the neighbourhood, held in the Library of the Hull Infirmary, January 6th, 1852, Dr. Cooper in the chair, on the motion of Mr. Eddie, of Barton, seconded by Mr. Watson, of Cottingham, it was resolved:—That this meeting considers that the system of treating diseases known by the name of Homœopathy is entirely without foundation in theory or fact; that it is dangerous to the public health, and prejudicial to the cause of science, and that it is propagated by the combined influence of ignorance and imposture. That this meeting notices with much regret that the Council of the Royal College of Surgeons does not think it expedient to interfere with the practice of homœopathy by individuals holding the diploma of the College, and practising with the sanction and approval which the possession of that diploma implies. That this meeting would respectfully submit to the Council of the College, and to the other Medical Corporations, the importance of at least making an official avowal of their condemnation of the doctrines of homœopathy, and of their conviction of the evils likely to result from its practice. That copies of these resolutions be sent to the Secretaries of the College of Surgeons, and of the Apothecaries' Company; and that the Editors of the *Lancet*, *Medical Times and Gazette*, and of the *Provincial Medical Journal*, be requested to insert them.

Progress of Epidemics.—The cholera still prevails in several districts of Jamaica, but the accounts from some places are more cheering; while it is raging in one or two parishes, it has lost its malignity in others. In St. James's, Hanover, and Westmoreland, the epidemic continued to sweep off a number of victims, and the reports from Trelawny are of a distressing nature. Diarrhœa and small-pox are also on the increase.

Metropolitan Interments Bill.—It would seem that this matter, after having been made the *protége* of the Government, is to be a castaway. It is evident that Lord John Russell would be glad to be quit of it. The noble Lord had appointed Tuesday for receiving a deputation from Marylebone on the subject; but at the eleventh hour that body is told that His Lordship had sent word that he was not coming up to town before Wednesday. This contemptuous treatment of a body of gentlemen by a public servant is most unbecoming; while the question of public health ought to and will be dealt with on very different terms. The country cannot afford a septennial plague—Malthus notwithstanding.

Solitary Confinement.—On the 1st of January, a printer, aged 21 years, died of "catalepsy." Mr. Bowring states, that "deceased was brought in from the House of Correction on the 26th of November last, on which day his term of fourteen days' solitary confinement expired. When received into the workhouse his appearance was that of a statue. It seems proper to ask, whether it is probable that solitary confinement, acting on the nervous system, could produce so great a change in so short a period."

Infantile Mortality.—Mr. Butterfield, Registrar of the sub-district, Islington East, states, that 213 deaths, the whole number registered by him since the 16th of October, 1851, occurred at the following ages:—100 under 5 years, 88 above that age and not exceeding 70 years, 16 at 70 and not exceeding 80, and 9 at more advanced ages. The analysis shows the great waste of infantine life.

Parish of St. Anne, Soho.—A public vestry was lately held in the vestry room of this parish, for the purpose of electing a vestry clerk, etc., for the year ensuing, when the following important memorials, copies of which have been forwarded to us, were proposed by a Mr. Edwards to be sent to the Poor-law Commissioners, and to the Registrar-General; to wit:—"We, being ratepayers of St. Anne's, Soho, in vestry assembled, this 22nd day of December, 1851, beg to draw your attention to what we consider to be a gross abuse of the power vested in the Registrar of this district. Mr. Jones, the Registrar, surgeon to the Strand Union Workhouse, surgeon to the out-door poor of this parish, and public vaccinator, has for some time past availed himself of the knowledge which his position, as registrar, afforded him to canvass the patients of the other medical men of this parish to bring their children to him, under the plea of gratuitous vaccination, whereby an introduction is afforded him into their family connexion,—a course we believe never contemplated by the framers of the Registration Act. We do, therefore, most respectfully trust that you will place the registration of this parish in the hands of some gentleman who will not abuse the power vested in him.—Signed on behalf of the meeting, Nugent Wade, Rector, in the chair." And also to the Poor-law Commissioners:—"We, being ratepayers of St. Anne's, in public vestry assembled this 22nd day of December, beg to draw the attention of your honourable Board to the present state of Poor-law medical relief in this parish. The parish of St. Anne's, Soho, consists, according to the last Census, of some 18,000 inhabitants, a great number of whom belong to the poorer classes. To perform the medical duties there is one gentleman, Mr. Jones, of Soho-square, who, in addition, holds the responsible and laborious offices of Surgeon to the Strand Union Workhouse, Registrar of Births and Deaths in St. Anne's, and Vaccinator. Now, gentlemen, apart from the gross injustice of one person having the monopoly of these varied offices, in a parish where there are a dozen other medical men, we contend that it is physically impossible for Mr. Jones to perform his duty. The medical requirements of the out-door poor are very great if attended to. The daily attendance at the Strand Union Workhouse should occupy much time, added to which, the duties of Registrar and Vaccinator are in themselves sufficient to occupy nearly the whole time of one person; and when it is considered that Mr. Jones has a considerable private practice, it must be apparent to all that the interests of both the ratepayers and the poor are greatly neglected. We therefore respectfully beg your honourable Board to take the above statement into consideration with the view of dividing the medical appointments, and, should you be of opinion that additional evidence is required to prove the necessity of your doing so, we shall be most happy to furnish it to your honourable Board.—Signed in behalf of the meeting, Nugent Wade, Rector." An opposition to these memorials was attempted by Mr. Jones's friends, who spoke warmly in his favour; but, after the statements of several of the guardians, and also of the ratepayers, the adoption of the memorials was carried by an overwhelming majority in a vestry of over 140 ratepayers.

METROPOLIS.

TABLE shewing the MORTALITY for the YEAR 1851, the several DISEASES, BIRTHS and DEATHS of MALES and FEMALES, AGE at DEATH, the DISTRICTS in which the DEATHS occurred, the TEMPERATURE and METEOROLOGY, and the INCREASE of POPULATION.

By Mr. B. SMITH.

DATE.	ZYMOTIC DISEASES.	SPORADIC DISEASES.															BIRTHS.		DEATHS.		TOTAL BIRTHS.	TOTAL DEATHS.	BIRTHS OVER DEATHS.	AGES AT DEATH.			DISTRICTS.					Mean Height of BAROMETER.	THERMOMETER.		Difference between the Temperature of the week and the same week on an average of 7 years.	General Direction of the Wind.	Amount of Horizontal Movement of the Air.	Rain in Inches.
WEEKS ENDING		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	Males.	Females.	Males.	Females.				0 to 15.	15 to 60.	60 and upwards.	West.	North.	Central.	East.	South.		Dry.	Dew Point.				
1851.																															Inches.	°	°	°		Miles.	
JAN. 4	239	51	201	119	63	321	73	12	8	7	1	1	34	16	59	32	124	829	763	693	676	1592	1369	223	553	485	330	204	244	223	305	393	29·751	47·1	41·3	+ 9·2	S.W.	1320	0·38
,, 11	173	41	169	119	41	275	55	12	7	9	1	4	30	13	43	9	17	792	788	492	531	1580	1023	557	451	336	235	166	195	170	223	269	29·635	42·2	39·7	+ 6·1	S.W.	500	0·32
,, 18	196	36	172	137	43	202	66	18	7	8	1	1	27	15	46	4	23	815	784	507	530	1599	1037	562	457	330	216	134	218	187	198	300	29·550	45·0	39·4	+ 8·1	S.& S.W.	1230	0·55
,, 25	211	47	148	112	40	192	52	16	10	8	1	1	21	19	35	10	29	761	759	451	505	1523	956	567	443	325	188	123	199	167	232	235	29·850	40·1	36·3	+ 2·3	S.W.	755	0·46
FEB. 1	230	41	199	118	42	206	46	9	6	6	3	4	24	22	49	9	15	773	764	537	504	1537	1041	496	443	356	232	149	188	172	214	318	29·498	41·1	36·9	+ 2·7	S.W.	815	0·75
,, 8	207	52	172	117	50	253	62	7	8	11	1	5	30	25	56	5	42	818	756	564	545	1604	1109	495	515	346	247	155	181	198	255	320	29·700	40·5	36·8	+ 2·4	Variable	1050	0·39
,, 15	212	53	167	106	47	220	56	19	9	5	...	2	27	26	38	9	35	821	755	515	521	1576	1030	546	467	359	210	165	210	175	209	277	30·130	39·6	35·9	+ 0·5	Variable	180	0·06
,, 22	208	58	190	144	66	277	55	14	9	13	3	3	27	31	61	16	36	792	775	607	606	1567	1213	354	501	413	299	179	250	216	285	283	29·870	42·5	37·3	+ 3·1	S.W.	830	0·30
MAR. 1	223	55	190	113	41	281	71	9	11	0	3	2	35	22	46	5	29	784	807	586	568	1591	1148	443	503	383	258	175	264	204	234	271	29·981	37·6	31·8	— 4·2	E. & N.	435	0·11
,, 8	251	50	208	125	70	321	72	7	8	8	1	6	36	20	45	11	6	795	785	582	665	1580	1247	333	570	374	302	175	220	255	272	325	29·830	39·4	32·6	— 1·6	.....	495	0·10
,, 15	283	55	233	123	53	352	67	14	10	5	3	7	39	24	74	18	38	770	763	684	717	1533	1401	132	593	442	366	220	293	251	281	350	29·650	40·5	35·7	— 1·2	.....	480	1·61
,, 22	321	47	228	134	53	350	75	12	9	10	3	2	18	25	69	21	30	824	756	669	743	1580	1412	168	566	456	390	236	282	250	265	379	29·351	44·9	40·8	+ 2·5	S.W.	1010	1·13
,, 29	245	42	195	167	53	272	65	7	9	13	1	4	42	25	65	66	117	947	833	754	664	1780	1418	362	638	465	315	202	289	231	299	397	29·388	46·3	41·1	+ 3·1	S.W.	1215	0·84
APRIL 5	180	47	207	123	35	220	65	13	8	4	2	1	21	33	42	11	31	808	752	* 571	* 479	1560	*1059	501	468	340	230	151	226	195	211	273	29·907	43·5	37·3	— 0·8	.....	720	0·17
,, 12	184	54	206	136	38	202	59	11	8	6	4	3	35	23	41	2	16	779	757	542	500	1536	1042	494	474	330	226	157	191	176	223	292	29·838	40·3	35·7	— 5·2	N.	670	0·24
,, 19	217	43	168	120	41	171	62	15	8	4	2	3	27	20	48	...	25	706	719	554	444	1425	998	427	459	306	209	174	201	182	194	244	29·776	46·3	40·0	— 0·5	E.&S.W	590	0·02
,, 26	232	40	196	131	36	197	61	12	10	2	1	2	29	21	45	7	23	771	732	569	566	1503	1075	428	544	299	216	169	213	188	211	291	29·546	49·9	46·4	+ 1·9	.....	510	1·32
MAY 3	177	44	211	128	42	146	60	16	6	0	2	2	21	31	45	9	34	757	730	484	516	1187	994	193	443	321	222	141	208	183	209	253	29·537	42·8	35·3	— 7·2	N. & W.	360	0·29
,, 10	233	32	208	121	43	157	64	9	11	8	...	5	31	31	41	15	30	791	781	555	486	1572	1041	531	511	335	195	108	202	181	216	274	29·608	47·4	38·8	— 4·8	Variable	700	0·14
,, 17	196	42	223	120	39	176	52	7	8	7	...	8	21	18	42	7	44	752	715	555	447	1467	1002	465	470	346	184	165	186	171	225	253	29·952	50·9	41·6	— 2·4	N.E.	465	0·07
,, 24	197	34	206	121	39	176	67	11	12	9	4	...	42	22	40	4	14	748	686	512	488	1434	1000	434	478	324	198	140	191	182	196	291	30·026	53·0	44·6	— 1·9	Variable	520	0·23
,, 31	220	40	200	98	38	136	79	7	12	9	8	5	23	20	45	2	36	761	709	507	483	1533	990	543	473	316	185	153	177	157	218	285	30·097	55·6	46·6	— 2·2	N.&N.E	440	0·22
JUNE 7	207	53	197	106	37	161	57	17	6	6	...	2	21	21	37	8	27	735	711	510	451	1446	961	485	449	329	183	116	202	147	208	258	29·840	55·2	46·3	— 3·2	Variable	1170	0·17
,, 14	196	33	184	105	32	139	58	13	7	9	...	8	31	27	35	8	41	650	633	517	414	1292	931	361	450	300	172	118	178	164	181	265	29·737	55·9	50·1	— 3·8	S.W.	970	0·77
,, 21	205	35	189	109	58	112	59	12	9	6	8	3	31	23	37	8	52	728	754	492	476	1482	968	514	483	310	165	109	188	165	186	260	29·041	60·2	51·9	+ 0·2	W.& S.W	1105	0·43
,, 28	218	50	189	127	30	124	54	13	8	12	1	...	27	25	39	20	85	716	723	519	513	1439	1032	407	496	352	182	152	201	169	244	266	30·032	62·3	51·2	+ 1·7	.....	590	0·00
JULY 5	214	46	202	132	33	114	68	11	3	7	8	2	27	23	40	16	60	746	781	534	468	1530	1003	527	436	368	197	107	194	176	186	280	29·874	62·9	53·3	+ 1·7	N.E.	675	0·76
,, 12	224	41	168	83	32	109	51	10	9	6	...	6	41	32	31	5	17	760	646	436	445	1346	881	465	441	274	157	161	165	131	193	228	29·777	59·6	51·4	— 2·3	W.	810	0·66
,, 19	269	49	157	85	42	112	51	14	15	11	8	2	25	30	35	4	26	719	685	425	418	1407	878	529	430	271	177	148	180	130	195	220	29·610	58·1	47·7	— 4·0	... ...	900	0·59
,, 26	282	31	186	121	26	85	54	16	10	6	2	1	22	35	46	5	28	704	674	473	483	1383	956	427	486	301	169	156	209	152	198	241	29·599	60·0	53·2	— 1·5	W.& NW	660	2·07
AUG. 2	333	38	182	107	36	81	71	5	11	8	2	1	31	24	41	2	27	773	678	512	498	1451	1010	441	511	269	196	145	200	188	241	236	29·765	63·4	57·4	+ 3·0	Calm.	610	0·26
,, 9	331	52	203	119	42	79	61	10	7	6	...	2	29	23	45	3	23	749	728	536	502	1477	1038	439	548	316	180	170	204	179	234	251	29·960	64·1	56·0	+ 2·6	N.E.	685	0·00
,, 16	312	46	189	109	26	79	73	13	12	8	1	3	32	44	36	6	39	774	726	530	531	1500	1061	439	565	317	179	161	217	199	196	288	29·862	64·6	56·8	+ 3·2	Variable	510	0·01
,, 23	311	41	170	96	18	72	63	13	9	8	...	3	31	40	39	6	18	772	683	502	455	1455	956	499	502	262	134	151	187	173	205	240	29·941	63·8	54·4	+ 2·8	S.W.	760	0·71
,, 30	378	40	181	94	38	77	69	8	4	7	1	5	31	40	43	6	32	702	695	560	501	1461	1061	314	565	319	176	156	200	165	241	299	29·795	56·4	47·2	+ 3·7	W.	1120	0·74
SEPT. 6	362	29	171	100	23	71	60	7	8	3	..	3	35	41	19	6	23	777	723	478	488	1506	967	539	518	363	141	143	218	139	194	273	30·028	60·5	52·2	— 1·1	.....	605	0·14
,, 13	290	58	179	108	34	82	68	0	6	7	1	2	28	30	44	13	63	731	695	535	491	1429	1026	403	465	359	198	147	217	152	206	304	30·308	57·1	46·2	— 1·5	N.E.	255	0·00
,, 20	305	51	213	130	37	122	54	10	16	8	3	2	36	32	38	5	83	742	785	569	529	1527	1097	430	496	394	206	163	206	178	284	316	30·190	57·3	48·0	— 0·0	N.E.	530	0·00
,, 27	267	43	173	110	31	77	60	5	9	9	2	5	32	22	45	8	58	732	755	473	485	1484	958	526	460	308	190	133	189	163	190	285	29·772	54·8	47·3	— 0·7	.....	600	0·15
OCT. 4	260	33	167	115	39	98	65	13	4	8	2	5	27	18	49	27	74	729	709	531	480	1429	1014	415	463	331	211	151	207	182	193	281	29·389	53·2	46·6	— 0·2	S.	855	0·61
,, 11	242	45	173	97	44	111	72	16	10	6	1	3	35	20	33	7	31	741	674	494	459	1415	953	462	433	342	174	141	190	144	218	257	29·743	54·6	47·9	+ 2·9	S.W.	955	0·42
,, 18	229	39	199	97	36	129	68	14	9	8	2	3	27	35	44	11	25	773	676	499	482	1443	981	462	425	367	184	167	191	187	195	241	29·729	52·8	45·8	+ 3·3	S.W.	875	0·18
,, 25	268	37	174	126	43	169	48	17	5	6	1	4	35	27	43	2	25	876	797	512	465	1673	977	696	470	326	177	126	183	161	221	286	30·042	54·5	48·9	+ 7·0	... ...	505	0·00
NOV. 1	222	49	156	78	33	165	54	6	14	3	2	6	34	16	38	3	23	759	721	436	425	1480	861	619	398	276	169	128	177	133	190	233	29·623	46·3	40·0	— 0·5	N.W.	645	0·38
,, 8	242	40	171	115	40	118	63	11	9	8	1	2	26	23	33	8	40	770	716	481	505	1480	986	494	461	317	202	140	194	186	213	256	29·681	40·0	33·5	— 6·3	W. & N.	650	0·17
,, 15	236	55	179	110	45	168	62	14	5	8	3	3	33	18	47	8	26	814	712	529	493	1526	1022	504	466	346	207	115	180	175	237	285	29·969	40·2	34·8	— 3·4	N.	360	0·20
,, 22	240	37	181	123	57	256	51	8	8	9	2	3	32	19	53	5	35	723	658	555	577	1381	1132	249	508	379	242	157	187	210	250	328	29·778	35·1	28·0	— 8·8	N. & W.	685	0·01
,, 29	252	51	228	125	63	298	58	15	11	8	2	7	25	27	53	9	37	772	769	626	655	1511	1279	232	575	426	277	162	225	250	293	319	29·698	35·8	30·8	— 7·8	N.W.	270	0·20
DEC. 6	249	48	225	149	49	333	69	6	10	6	1	3	25	27	70	4	38	788	716	624	695	1528	1316	212	583	427	305	217	236	200	260	405	30·131	38·8	34·0	— 3·4	Variable	225	0·03
,, 13	243	36	190	125	41	281	66	15	6	8	1	5	41	18	51	7	51	802	736	589	605	1537	1194	343	525	398	269	157	263	202	270	302	30·110	41·8	39·8	+ 3·1	S.W.	801	9·00
,, 20	251	56	201	121	55	252	51	15	12	13	3	2	33	19	52	6	53	783	672	603	603	1455	1206	249	573	396	233	187	250	210	257	302	30·158	41·5	37·2	+ 1·0	.....	436	0·05
,, 27	263	45	140	111	37	219	61	10	6	8	3	4	26	30	39	14	66	660	615	526	511	1275	1040	235	481	334	211	133	188	117	303	269	30·021	38·7	33·6	+ 0·2	Variable	430	0·45
Total	12652	2323	9826	6098	2173	9312	3196	603	441	403	89	160	1545	1311	2311	516	2601	39882	37984	28096	27245	77871	55354	22517	25712	17999	11361	8326	10860	9474	11810	11884							

* A discrepancy of 9 occurs in the weekly returns, between the Deaths as to sex and the total number for the week ending April 5.

Under the head "Zymotic Diseases," in the preceding Table, are included:—Small Pox, Measles, Scarlatina, Hooping Cough, Croup, Thrush, Diarrhœa, Dysentery, Cholera, Influenza, Purpura and Scurvy, Ague, Remittent Fever, Infantile Fever, Typhus, Metria (or Puerperal Fever), Rheumatic Fever, Erysipelas, Syphilis, Noma or Canker, and Hydrophobia.

Under the head "Sporadic Diseases," 1. includes Dropsy, Cancer, and other diseases of uncertain or variable seat. 2. Tubercular Diseases. 3. Diseases of the Brain, Spinal Marrow, Nerves, and Senses. 4. Diseases of the Heart and Blood-vessels. 5. Diseases of the Lungs and of the other Organs of Respiration. 6. Diseases of the Stomach, Liver, and other Organs of Digestion. 7. Diseases of the Kidneys. 8. Childbirth, Diseases of the Uterus, &c. 9. Rheumatism, Diseases of the Bones, Joints, &c. 10. Diseases of the Skin, Cellular Tissues, &c. 11. Malformations. 12. Premature Birth and Debility. 13. Atrophy. 14. Age. 15. Sudden. 16. Violence, Privation, Cold, and Intemperance.

DEATHS *in the Metropolis for the week ending Saturday, January* 10, 1852.

Causes of Death.	Jan. 10. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	480	347	284	1111	11384
Specified Causes	477	347	284	1108	11332
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases	167	42	19	228	2249
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	...	25	20	45	536
3. Tubercular Diseases	55	100	8	163	1826
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	57	37	37	131	1299
5. Diseases of the Heart and Blood-vessels	4	17	24	45	420
6. Diseases of the Lungs and of the other Organs of Respiration ...	109	58	82	219	2668
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	22	35	16	73	597
8. Diseases of the Kidneys, &c. ...	...	7	11	18	111
9. Childbirth, Diseases of the Uterus	...	11	1	12	99
10. Rheumatism, Diseases of the Bones, Joints, &c.	5	3	2	10	85
11. Diseases of the Skin, Cellular Tissue, &c.	1	...	4	5	14
12. Malformations	7	1	...	8	29
13. Premature Birth and Debility ...	27	...	...	27	219
14. Atrophy	17	...	...	17	151
15. Age	...	...	53	53	714
16. Sudden	...	1	1	2	99
17. Violence, Privation, Cold, and Intemperance	6	10	6	22	216
Causes not Specified	3	...	...	3	52

Captain Kincaid, Inspector of Factories for Scotland, has appointed Mr. S. Kincaid, surgeon R.N., (late of H.M. ship Helena), a certifying surgeon of factories *pro tem.*, with the sanction of the Director-General.

[Advertisement].—To the Medical Profession.—The members of the Medical Profession are usually dependent upon their own personal exertions for their subsistence. If health fail, they fall into distress; if they die, their families are unprovided for.

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TO CORRESPONDENTS.

A Correspondent inquires how the pamphlet of Dr. W. Wood, of Bethlem Hospital, "On the Plea of Insanity, and the Management of Criminal Lunatics," appears in the "Journal of Homœopathy," as having been forwarded to the Editor for review. Perhaps Dr. W. Wood will himself reply to the *query*, for it surpasses our comprehension.

Mr. Jones of St. Helier's.—The reports from the Jersey Hospital shall receive early and continuous insertion.

Dr. Ely, of Rochester, is quite right. "*Nemo mortalium omnibus horis sapit.*"

Mr. Bate, of Swansea.—Accepted.

R. G.—There is no such examination at St. Bartholomew's. We presume our Correspondent means the preliminary examination at the Apothecaries'-hall, which we understand will next take place in April, and be as follows:—

Cicerone—Oratio pro Milone.
Æneid—First book.
Algebra, to Simple Equations.
Euclid—First book.
In Greek, the Acts of the Apostles or Xenophon, and some portion of Anabasis.

We do not, however, give this "upon authority."

A Student, University College.—The facts are so well known that it is needless to re-open the affair. Right must at last prevail; and, if the offender gets but rope enough, he is sure to hang himself.

The Letters of Dr. Inman, Dr. Ayres, and Mr. Quekett, in reply to Dr. J. W. Griffith, reached us too late for this week's publication.

The Letter of Professor Macdonald, of St. Andrews, has been received and is under consideration.

Dr. Foley, of Kilrush, is not forgotten.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your publication of last week, I find a lengthy correspondence in which I am courteously described as a person notoriously disqualified. The facts of the case are these:—I attended Mrs. O. C. in her confinement; all went on well for seven days, when she was suddenly attacked with symptoms of puerperal mania. A messenger was despatched to me in great haste, but did not reach my house or deliver the message. Mr. O. C., tired of waiting, consulted Mr. McGill, a chemist and druggist (Mr. Noble's Poor-law vaccinator,)—hence Mr. N.'s visit; but I arrived at the house shortly after Mr. Noble's departure.

Respecting my own qualifications, I would just add, that I have served my apprenticeship to a general practitioner, and completed the full course of lectures required by the College of Surgeons, and I intend presenting myself for examination as soon as my circumstances will enable me to do so. I have also served as a medical assistant during a period of upwards of twelve years in various respectable and responsible situations.

I am, &c. William Hughes.

15, Chatham-street, Piccadilly, Manchester.

[The facts mentioned in Mr. Hughes's letter in no way weaken the force of our remarks written before its receipt. Mr. Hughes is, according to his own admission, an unqualified person. We use the term in the sense in which it is understood by every professional man.]

A Student.—We can give you no better advice—if Mandeville's version of the passage be correct—than what is contained in a sentence of Hippocrates,—you must work.

Dr. Busham's very charitable request is complied with.

COMMUNICATIONS have been received from—

Mr. Bransby Cooper, of Guy's Hospital and Spring-gardens; Mr. Quain, of University College and Cavendish-square; Secretary of the Royal Institution; Mr. Stokes, of Brook-street, Hanover-square; Mr. Fergusson, of King's College and George-street, Hanover-square; Mr. Spencer Bate, of Swansea; Dr. Hector Gavin, *(from British Guiana;)* Professor Syme, of Edinburgh; Inquisitor; T. G.; Sceptic; Dr. Barclay, of St. George's Hospital and Curzon-street, May Fair; Mr. Cass, of Cowes, Isle of Wight; Dr. Henry G. Wright, of Paris; Professor Gregory, of Edinburgh; Dr. Rigby, of Berkeley-square; Dr. Macdonald, of St. Andrews, Fife; Mr. Jones, of the Jersey Hospital and St. Helier's; Dr. Ely, of Rochester; Dr. Roe, of Plymouth; Mr. Stedman, of Whittlesea, Isle of Ely; Mr. Toynbee, of Savile-row; Dr. Richmond, of Queen's-square, Bloomsbury; Dr. Bascome, of Wyke House, Brentford; A Surgeon; Dr. Basham, of the Westminster Hospital and Chester-street, Grosvenor-place; Mr. Buxton, of Great George-street, Westminster; Mr. Grimsdale, of Liverpool; Dr. Ayres, of Portland-place, Wandsworth-road; Dr. Collins, of Wanstead; Mr. Locking, of Hull; Dr. Foley, of Kilrush; Mr. Mechi, of Tiptree-hall, Essex; A Student of University College; Dr. Hunt, of Brook-street; Dr. Cotton, of the Hospital for Consumption and Clarges-street; Mr. Hughes, of Chatham-street, Manchester; M.D.; Mr. Barlow, of the Westminster Hospital; Mr. Quekett, of the Royal College of Surgeons and Blandford-square; Mr. Collins, of Dorrington-street, Coldbath-fields; Mr. R. Ward, of the London Hospital and Broad-street-buildings; Philos; Dr. Inman, of Liverpool; A Subscriber; M.D. and Subscriber.

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Mr. —, a gentleman advanced in life, but still energetic and otherwise in good general health, has been subject to obstinate constipation during a great part of his life, and this notwithstanding that he has been active in his habits, as well as careful in the manner of his living. For the relief of this great inconvenience, he has used at various times, in the words of the friend (Mr. Foster, of Huntingdon) who introduced Mr. — to me, "all imaginable medicines." Lately the confection of senna has been taken with advantage. The following is the note made respecting this gentleman's suffering when I first saw him.

The hæmorrhoids not only descend when the bowels are evacuated, but even when the patient walks a short distance; and when the protrusion takes place, so much distress is felt, that the immediate replacement of the tumour becomes necessary. Hence Mr. — is hindered from entering into society as he would desire; and he is subject to the annoyance of being obliged even to avoid walking with his family.

I found the skin of the anus preternaturally loose; and, with a little effort upon the part of the patient, a complete and thick ring of dark-coloured hæmorrhoids was made to project. The vascular growth starts suddenly out from the surrounding mucous membrane, and its limits are thus clearly defined. The vessels are evidently much thickened.

The hæmorrhoidal mass being brought fairly down, after the action of aperient medicine, three double ligatures were applied, and the part was then replaced within the sphincter. The patient was surprised when told that the operation was ended. He subsequently stated that he had suffered nothing that could be called pain, either during the application of the ligatures or afterwards. There was, he said, a degree of uneasiness, and no more. He slept well that night; was confined to a couch a single day, and went out some way on the next day but one after the operation. The loops of ligatures were separated on the fourth or fifth day, and the patient left town in a very few days after. He has since then informed me, by letter, that he is quite free from every appearance of the hæmorrhoids and the suffering they occasioned, but that the old constipation continues to be a source of annoyance.

Internal Hæmorrhoids.—Frequent Bleeding and much Suffering during Six Years.—Recovery.—Good Health reported Seven Years after Treatment.

George Youle, aged 27, an engine-maker, was admitted into the hospital December 26, 1851. His face is thin, sallow, and gloomy, expressive of habitual suffering or despondency. He states his habits to have been regular and his health good, with the exception of the complaint for which he has sought to be taken into hospital; the history of which is as follows:—

About six years ago, the patient having been previously in his usual good health, piles were protruded from the bowel, and they bled. At that time he was constantly working eighteen hours a day; and he continued to do so during two years and a half. This was at Gateshead. "People do," he says, "work very hard down yonder." He has been often three days, and sometimes a week, without an evacuation from the bowels. Piles came down whenever the bowels acted, and very much through the day as well. He has been for all these years in a constant state of suffering, and he has often lost blood. For as long as three months together, he has been unable to work on account of the illness and debility occasioned by piles and bleeding.

During several years,—indeed from the invasion of the disease up to the time he came to the hospital,—he continued to take "doctor's medicine" of various kinds, and from many "doctors." He was once salivated.

Upon examination, the skin about the anus was found to be prominent, and within this there were seen several dark hæmorrhoids, as well as some of a brighter colour. The hæmorrhoids were in part visible, without any effort being made to force them into view.

After preparation of the patient for a few days, by regulated diet and the action of aperients, the hæmorrhoids were transfixed with double ligatures, which were secured as in the preceding case. Four such ligatures were applied. After being tied, the hæmorrhoids, though pressed upwards, were still in part visible, owing to their length and size. During the operation no pain was felt except at a single point, where the part to be tied being low down, a very small portion of the skin was included in one of the ligatures. It was only when this ligature was being tied that the patient winced for a moment. Two days afterwards there was a good deal of œdematous swelling under the skin aroound the anus. The ligatures came away about the fifth day, and in about a week after he left the hospital.

From the time of the operation this man has felt no inconvenience from a malady which, during six successive years, had caused him extreme distress. I saw him in the present year. He was then, and had been since the operation, in excellent health. More recently, too, I have received from my friend Mr. C. W. Hind, who is in practice as a surgeon at Swindon, where Youle is employed, the following answers to a few questions I requested him to ask of my former patient:—

"Youle never loses blood from the bowel or from any other part. He has not lost any since the operation.

"His bowels act regularly without the assistance of medicine. He never takes any.

"He attributes the improvement entirely to the operation, not to medicine, as he has taken none since he was under your care; neither does he attribute it to any change in his habits, for, although he is now stouter and stronger than he was before, his daily work is the same. Besides, he worked extra work, (until ten or eleven o'clock at night,) after the operation, for a length of time, as he had done at a former period of his life. He is now in perfect health.

The next case is an example of still greater suffering and depression, continued, too, over a longer period, the sex and station of life being different from the last case.

Internal Hæmorrhoids.—Confinement during nearly Nine Years from Pain and frequent Bleeding.—Recovery.—Good Health Reported Six Years' after Treatment.

The patient, a lady, resident in the Isle of Wight for some time on account of infirm health, came under my care

in August, 1845, having been addressed to me by my friend Dr. Arnott. The following narrative of her case is abridged from a more detailed one, communicated to me by her husband, a solicitor. Mrs. ——, who has been subject to constipation of the bowels for a great part of her life, became worse in this respect fifteen years ago, although she then resided in the country, and was an early riser, as well as in the habit of taking "plenty of exercise" a-foot and on horseback. At that time, and subsequently, she had occasional "attacks of piles," but so slight as not to affect the general health. In 1835, three years after her marriage, this lady suffered much during several months from "irritable bowels, accompanied with mucous discharges." This complaint caused so much distress, and was so rebellious to medical treatment, that a change of residence from the North to the South of England was advised and carried into effect. It was subsequently, and after a severe attack of the dysenteric affection, that hæmorrhoids, which had been for some time quiescent, became troublesome, and bleeding was now for the first time observed. Now "the slightest exercise" [to use the words of my informant] "gave such great and lengthened pain, that she gradually gave it up entirely; and from that time till we consulted you, an interval of nearly nine years, she has been a constant sufferer, seldom walking further than from her bed-room into the drawing-room, excepting about two months annually, in the height of summer, when, singularly enough, we have remarked the complaint seemed to sleep. The hotter the weather, the more apparent was the improvement; and during this annually short period of apparent convalescence, she has generally been able to walk about a little in the garden, but always sank again into the same state" of suffering. I learned, upon inquiry, that some members of this lady's family were subject, more or less, to hæmorrhoids. So likewise was her father, in a slight degree; but he had another and more serious disease in the same part,—namely, carcinoma.

When I first saw Mrs. ——, she was pale, emaciated, and languid. She was evidently much depressed by long illness and losses of blood. After the use of an aperient there was considerable prolapsion of the rectum, and several hæmorrhoids were brought into view. There was no evidence of pulmonary or other organic disease. Palliative treatment was evidently here out of the question. The descent of the bowel must be prevented, and the bleeding vessels must be permanently closed.

After some preparation during a few days, double ligatures were passed through some of the hæmorrhoids, previously brought fully within reach after the free action of aperient medicine. In the subsequent progress of the case an abscess of small size formed at one side between the anus and the tuberosity of the ischium; but even with a little retardation of her recovery caused by this accident, the patient left town within three weeks after the operation.

I had an account from Mr. B. about a month afterwards, stating that, amid the great improvement which resulted from the operation, some uneasiness was experienced about the lower end of the rectum. This inconvenience was speedily relieved by the application of a few leeches and the use of enemata.

In the spring of the following year (March, 1846), my usual correspondent, writing about his father-in-law, who likewise had disease of the rectum, gave me a most favourable statement of his wife's health, adding, that she had taken out-door exercise during the whole winter, and that "she can walk three, four, or five miles daily." The continued use of the enema and an aperient pill were, however, still required. It may be added further, as indicating the completeness of this lady's recovery, that in the same year (1846), her father (whose case will be noticed in another lecture) mentioned to me that she had lately become a mother for the second time, her former child being then twelve or thirteen years old. During the present year, too, I have been informed by Mr. B., the lady's husband, (he himself being now the patient,) that she, and the child born since the operation, are in sound health.

Yet another case,—one in which the chief phenomenon was the sudden and rapid loss of blood,—before I enter upon the comments which the facts narrated suggest.

Bleeding at Intervals for Sixteen Years, and in latter part of Period very Profuse.—Recovery.—Strong Health Reported Six Months after Treatment.

George Chyramski (Hospital Case-book 17), aged 27, was brought into the hospital, blanched from loss of blood, in November, 1849. He is a native of Poland, but has been resident in London during twelve years. Is by occupation a hawker, and leads therefore a vagrant life. His father, who is still living, aged about 66, is subject to bleeding from the bowels, but not to any large amount; his mother is a healthy person. Chyramski has habitually had constipated bowels, and he is on this account obliged to use aperient medicine continually. Has had no other disease of importance than that for which he has been taken into the hospital.

When he was about ten or twelve years of age, he first observed, after a long walk, some bleeding from the bowels. It was then but slight, and since that time it has commonly returned at intervals varying between one month and three or four months. At an early period, the hæmorrhage only accompanied the expulsion of the fæces. Since the discharge of blood first took place, he has not considered himself quite rid of the liability to it. The longest interval at an any period was ten months.

The descent of the bowel first occurred about four years ago, and since that time the bleeding has not been absent for more than a month at a time, its recurrence varying from intervals of four or five days to as many weeks. It has often been sudden and profuse, and has come on, too, when there was neither straining nor protrusion of the piles, even while he was walking in the streets.

Upon his admission into the hospital, the countenance of this patient was heavy, pale, bloodless; the eye-lids puffy; the lips blanched; the tongue pale, semi-transparent. The skin generally presented the same pallor and waxiness of appearance. The pulse was quick, weak, and jerking. Venous murmurs were audible in the neck. The lungs were found to be sound. The liver not enlarged; but a degree of tenderness was felt on pressure being made over this organ. Urine was healthy.

For relief of the immediately urgent symptoms, he was kept in bed, placed upon full diet, and took gallic acid and sulphuric acid, with cinchona, as well as a few doses of opium. In ten days, so great was the improvement, that the patient insisted upon leaving the hospital, on account of some urgent business, promising, however, to return speedily for the purpose of being relieved of the source of the repeated bleedings. Accordingly, in the following month, he was re-admitted, but not before the hæmorrhage had returned. Two days previous to his return he had been attacked in the same way, and he lost so much blood, that, upon admission to the hospital, he was anæmic as before. In a week, with treatment similar to that used on the former occasion, his condition was greatly amended, and I then considered him in a state favourable for the operation. The hæmorrhoids still descended with every evacuation of the bowels; but there was no loss of blood since the second coming to the hospital, till the morning of the operation. It ceased after the protruded part had been replaced.

The protruded hæmorrhoidal mass, when forced down for the operation, was large, and upon one side was as thick as a pullet's egg. Florid blood was projected from three round openings, the jets being each as large as a thick pin, and blood escaped very freely. Three double ligatures were passed. After the operation, laudanum was twice given during the evening. The progress of the case was rapid, and in every way favourable.

In about six months afterwards, this person called upon me for a purpose not connected with his health. He was so robust, and looked altogether so healthy, that I did not recognise him till he had brought the facts connected with his case to my recollection. He had had no hæmorrhage since the operation; and he felt in better health than during several previous years. Moreover, there was not then any uneasiness in the region of the liver.

The points in connexion with the history of the foregoing cases which require comment are these:—The probable cause of the hæmorrhoidal disease; the circumstances which rendered an operation necessary, including hæmorrhage; the object and plan of the operation.

Causes of Hæmorrhoids.

Sedentary habits, it has been shown in the former lecture, promote the hæmorrhoidal disease, yet it is remarkable, that in not one of the persons whose sufferings are above recorded, do the habits appear to have been of this kind; and there was no view to that point in the selection of their cases.

But inasmuch as a sluggishness of the bowels existed in all, and as this distressing inconvenience usually attends upon the disease, it is well to inquire whether that condition should be considered the cause of the hæmorrhoid, or what the nature of the connexion between the two may be. And first, was the hæmorrhoidal disease induced by the mechanical pressure of fæcal matter upon the veins in the abdomen? It is certain that pressure upon the trunk of a vein, by retarding or obstructing the flow of blood, will induce dilatation in the extreme venous radicles. Yet it seems to me, that the fact of the mechanical impediment is too lightly assumed in the case before us, and for this reason among others, that there is a want here of a common effect of obstructed venous circulation, namely, the infiltration of the tissues with serum—œdema. But should this form of mechanical obstruction to the flow of the blood be properly questioned, or if it should be even altogether discarded, the connexion plainly existing between constipation and the hæmorrhoids still seems to me to admit of a reasonable explanation by reference to the probable state of the portal circulation, and to the process of defæcation. For when the alvine evacuations are slow, it is probable that the secretion of bile is not duly performed, and that the portal circulation is at the same time inactive. But inactivity in this (latter) would operate upon, or would include, the veins of the rectum. Again, the process of defæcation is something more than the removal of the *débris* of the ingesta and of the secretions from the glands accessory to the alimentary canal. For, during the progress of the excrementitious matter along the intestine, a serous secretion is going on from the large and numerous vessels of this, and if the evacuation of the bowel be slowly performed, the secretion from its surface is in the same proportion slow, and the converse. To the want, then, of a due amount of the proper secretions in the liver and in the intestinal canal, may the turgescence of the veins of the rectum be probably owing. And in this mode of viewing the subject, the inactivity in the formation of bile might be regarded as giving rise at the same time to the sluggishness of the bowels and to the hæmorrhoidal disease. Bear well in mind, however, that this reasoning is not to be regarded as a statement of ascertained facts. I offer it only as a more or less reasonable conjecture, which may serve, till we find a juster one, the purpose at least of weaving the facts together. But, whatever be the true theory of the causation of hæmorrhoids, or the nature of the connexion between that disease and inaction of the bowels, —whether the one really induce the other, or both acknowledge the same cause,—the fact still remains for our practical guidance, that while the sluggishness of the bowels aggravates, their free action tends to relieve the hæmorrhoidal malady.

While we are occupied with this subject it must not be overlooked, that in a large number of persons constipation exists without any apparent enlargement of the veins of the rectum,—at least any diseased enlargement. Of this every surgeon's experience will supply him with examples. I have known persons, whose statements respecting the infrequency of their alvine evacuations were almost marvellous, and yet they were wholly free from hæmorrhoids. With such facts before us the conclusion seems unavoidable, that whatever be the immediate or exciting cause of the disease, a certain constitution of the vessels giving a tendency to morbid action,—an idiosyncracy, as it is called,—must exist where the vascular disease of the rectum arises. It is only in this way that, in the present state of our knowledge, we seek to account for the existence of several other diseases,—a varicose state of the veins of the leg or of the testis, for instance, in a person otherwise, to all seeming, in vigorous health,—the tendency to the development of diseased action in the veins being in these several instances promoted, I may in passing observe, by the position—the dependent position, that is to say—of the vessels; for analagous disease is but very infrequently met with in any degree in the veins of other parts. It serves to strengthen this view of the subject, that a hereditary tendency to the complaint is often traceable. Several members of the family of one of the patients whose history I have read to you were affected with hæmorrhoids, and the father of another had long been subject to the same disease from which the son began to suffer at the early age of eleven or twelve,—a very unusual age for the manifestation of hæmorrhoidal disease.

The after-history of the cases in reference to the question that we are now engaged with is not immaterial. Two of them have found it necessary to continue the use of aperient medicine, although wholly free from the local malady; one (Youle) has been restored to health in all respects. It would seem, indeed, as if the usually imputed cause and effect had changed places in this person, for the constipation ceased upon the removal of the hæmorrhoids.

Circumstances Rendering an Operation Necessary.

In the former lecture, the morbid state of the vessels of the rectum was found to be part of a general ailment, associated with indications of vascular turgescence elsewhere, and subsiding with the more general congestion. This seems to be the usual, though not invariable course, at the first invasion of the disease. But, in the cases above cited, the hæmorrhoidal affection had grown into a substantive disease, and was to be regarded as in itself the ailment to be remedied. It was not associated in any of these patients with a discoverable organic change elsewhere; and there was, therefore, no objection to the application of a remedy on this score. The removal of the disease was rendered necessary in the first of the cases, not by the mere presence of the hæmorrhoids, but by the inconvenience, and even pain —the "misery," to use the patient's own expression—arising out of their constant displacement from very slight causes during a series of years. The hæmorrhoids descend with the mucous membrane, which in this place is but loosely connected with the subjacent or superjacent structure, and not only is the tumour thus formed by the thickened vessels and the blood contained within them, a source of much discomfort, but, if the part be not speedily replaced, the sphincter, thrown by the presence of the swelling into spasmodic contraction, produces a strangulating effect upon the vessels, and hence arise increased turgescence, inflammatory action, and pain.

The object to be accomplished for the cure of such a case is, to bring about adhesion between the mucous membrane and the other coats of the bowel, so as to prevent the prolapsus. The adhesive process required to attain this end may be excited by the removal either of some of the hæmorrhoids or of a portion of the skin and mucous membrane at the margin of the anus. The effect of such an operation is here, as elsewhere, the effusion of lymph, the formation of a cicatrix, and, as a consequence of the process, the agglutination of the parts together. But as regards the two methods of proceeding, I prefer the removal of the hæmorrhoid, because it is not only more direct, but, as I believe, more certain also, the diseased part, the source of the evil, being put out of the way. I have no fear of any unfavourable result, provided the precautions to be hereafter mentioned are observed.

Turning now to the other cases, you will find that, besides the distress produced by prolapsus, there were in these losses of blood likewise. One (Youle) had been suffering from pain and debility, occasioned by frequent bleeding, during six years continually; another (Mrs. ——) had been, from the same causes, during nearly nine years, and for ten months in each of those years, confined to her room completely prostrated; while in the last of the cases the hæmorrhage was so profuse as to imperil life by the mere loss of blood. Upon this subject, considering its importance, I shall offer some further observations before proceeding to describe the operation.

The discharge of blood is a frequent accompaniment of hæmorrhoids; but in the greater number of the examples of this complication that come before us, the quantity is but inconsiderable; and when it is so, especially where the occasional and slight hæmorrhage attends upon some general constitutional ailment or organic disease, it is not to be arrested permanently without careful consideration of all the circumstances of the individual case. The escape of the blood usually occurs when the bowels act. At this period, the hæmorrhoids are forced below the sphincter, and the hæmorrhage lasts during the protrusion, or, what is commonly the same thing, during the efforts of evacuation. In the last of our cases, the loss of blood had occurred at other times when there was no protrusion, in fact, while the person was walking in the streets. But in this respect, as well as in the amount of blood lost, this was an extreme case. These circumstances are not without their practical indications. Thus, the time for the evacuation of the bowels must be as brief as possible; constipation is to be obviated; and the protruded part is to be speedily replaced.

Moreover, it is important that the surgeon should investigate for himself the amount of the hæmorrhage. I have found by examination the loss of blood to have occurred at a single time to the extent of half a pint, when the patient was not aware of more than a little oozing. For the arrest of this hæmorrhage, how far may local astringents be relied on? To this question, my answer is, that while I cannot aver that they are altogether to be disregarded, I must add that, in the circumstances before us, I have but little reliance on the efficacy of such applications. It is not often that we have occasion to observe the actual escape of the blood from hæmorrhoids. Still, I have had in several cases the opportunity of doing this, and in every instance I found that the blood issued from one or more small but distinct openings. Of the bleeding, in the fourth of the cases above cited, it is mentioned that florid blood was projected from three round openings in continuous jets. Bleeding in any other form has not fallen under my observation. I have not seen anything that could be termed an exudation from a general surface. Now, judging by what we witness in other parts, it seems probable that styptics, if directly applied to the bleeding orifice, would have some influence in restraining the hæmorrhage in the cases before us; but the difficulty is to make the application directly to the part. In order that it shall with certainty reach the one or two bleeding points in a cavity of no small dimensions, the injection must be used in considerable quantity. If, however, the quantity should be large, it will bring on the *nisus* for evacuation, which ought by all means to be avoided. Again, although some astringents taken into the stomach have, in hæmorrhage elsewhere, considerable influence, they have but little if any beneficial effect in the bleeding which attends upon hæmorrhoidal disease. The patient Chyramski took gallic acid for some time, but apparently without any good result. Indeed, the influence of the forcing efforts of defæcation upon the venous circulation, the great distension of the vessels when protruded, and the constriction of the sphincter, are likely to render the use of all such remedies nugatory. On the whole, therefore, I rely mainly for the arrest of the hæmorrhage, on the replacement of the vascular growth within the sphincter, and the maintenance of the horizontal position of the body; but if the loss of blood be considerable or continued, the operation for affording permanent relief must be performed. The process by which it has been already stated the prolapsion is prevented, is sufficient for the cure of the hæmorrhagic tendency likewise. The plan of operating is therefore the same, only that the direct action upon the hæmorrhoids is even more necessary here than where the prolapsus is not attended with bleeding.

Now, as regards *the operation*:—In order that the healing process should go on prosperously afterwards, it is necessary, in this as in all other cases in which any delay is admissible, that the patient's health should be well looked to before the operation is proceeded with. It was on this principle that one of the patients who, you remember, was faint and exsanguined when brought to the hospital, was allowed to continue for a time under care before the operation was undertaken; while, inasmuch as there was nothing in the state of the health of the other cases to forbid the operation, the free action of an aperient, and the regulation of diet for a couple of days, was all the preparation that was thought necessary.

The ligature used is of thick silk, and it is carried double through the middle of the hæmorrhoid, or of the portion of this to be acted upon, by means of a needle furnished with a handle, or even with a common bent needle. Each part of the ligature is to be tied at the side, and as firmly as possible, so as to destroy the vitality of the included hæmorrhoid. The extent of the mass to be included I am in the habit of regulating with a tenaculum, committed to the hand of an assistant after its point has been inserted. The same purpose may be attained by means of a hare-lip pin, passed transversely, and made to penetrate at both sides where the ligatures are to lie. When the purpose has been served, the pin, or tenaculum, is of course withdrawn. Caution is necessary, that none of the skin be included in the ligature; and, should any happen to be within the space to be acted on, it must be divided in the track of the ligature before this is tied. It is thus that pain during the operation, and suffering afterwards, are to be avoided. The gentleman whose case is first cited stated, that he felt no pain during the operation or after,—only a degree of uneasiness; and he was able to employ himself in reading immediately after. The patient Youle, however, felt some pain, because a small point of skin happened to be comprised within one of the ligatures.

For the proper performance of the operation, it is best that the bowel should be prolapsed, and this will be effected after the use of an aperient or an enema, or even in some instances without these, by the efforts of the patient. The co-operation of the patient is required to keep the part properly within reach. This circumstance has its importance when the propriety of administering chloroform is to be decided upon, for when insensibility is induced, and the voluntary efforts of the patient are thereby necessarily wanting, the hæmorrhoids, though previously brought into view, are commonly at once withdrawn within the sphincter. It then becomes necessary that the bowel should be dilated and the hæmorrhoid drawn down with a pair of "fenestrated" forceps. This plan, however, is not satisfactory. It does not allow of the precision in applying the ligature that is desirable. On this account, when obliged by the wishes of the patient to administer the anæsthetic agent, I have in some instances, before its administration was begun, passed a couple of ligatures through the hæmorrhoids, (after prolapsion had been brought about,) leaving them of course quite loose till after insensibility was induced. But in cases of well-defined internal piles I much prefer that the patient should not be rendered insensible, for, besides the inconvenience caused by the want of his co-operation during the operative proceeding, it is to be taken into account that the pain, as already mentioned, is really inconsiderable, while the chloroform in this, as in some other cases, frequently occasions no trifling amount of after-discomfort.

After this operation, as after most others, it is well to administer an opiate if the patient should feel uneasiness. The action of the bowels is not to be speedily looked for, but, should they not act spontaneously in three or four days, I direct an enema or a mild aperient to be administered. There is occasionally a difficulty in evacuating the urine. Hot fomentations and a dose of opium will expedite the removal of this distressing incommodity. Very rarely indeed is it necessary to introduce a catheter.

The sequel of the cases cited at the commencement of this lecture may be considered the type of the result of the operation in others. An unfavourable, or even unsatisfactory termination, is of extremely rare occurrence. Sir B. Brodie stated, in 1835, that he had then seen but two examples. Mr. Copeland (1824) mentions one, and it has fallen to my lot to witness a single instance also. In judging of such results, it must be remembered, that there is scarcely an operation, be it ever so trivial, that may not, in extraordinary circumstances prove fatal, just as it needs no long acquaintance with the practice of an hospital, to have occasion to observe serious consequences, and even death, to follow from a slight accidental wound or abrasion; nevertheless, one has little apprehension about such an operation or injury. It is right, however, to use experience—our own, and that of others, so as to reduce the possibility of such an event to the lowest degree possible. Now, in the case which I had occasion to examine *post-mortem*, there was serous effusion into the cellular membrane of the pelvis around the rectum, and the lower part of the bowel was in a sloughy state. There had been, before the operation, repeated losses of blood to a considerable amount, and the person was in a feeble state, though able to go abroad and attend to his occupations. Several double ligatures (five, I believe) had been applied to the hæmorrhoids, which were entirely of the internal kind. A similar condition (of diffused cellular inflammation) is mentioned by Sir B. Brodie, as present in a body which he examined under the same circumstances. With my present experience, my conclusion is, that it is important, in all cases, to avoid applying ligatures in large numbers, and that this rule is especially important where the patient is in impaired health, or debilitated by loss of blood. I am disposed to limit myself to the application of three double ligatures, though I have, in several cases, used a greater number with the best result. The smaller number will, in most cases, be sufficient to prevent the prolapsion afterwards, and the hæmorrhage as well; but even should it not have this effect altogether, it is better to have to return to the application of a ligature or two more, than to do too much even once in a life. I have acted in several cases upon this principle, where the state of the patient's health seemed to require such caution.

ORIGINAL COMMUNICATIONS.

PRACTICAL CASES.

[To the Editor of the Medical Times and Gazette.]

Sir,—The accompanying cases, having been transmitted to me for publication by Mr. Bedford, (formerly a student, and now an old friend,) surgeon to the St. Mary's Hospital, Hobart Town, Van Diemen's Land, I send them to you by his desire, as demonstrating the correctness of those opinions and precepts he had had the opportunity of hearing me enforce in my lectures on mortification and on wounded arteries. I am, &c. G. J. Guthrie.

4, Berkeley-street.

CASE OF WOUNDED AXILLARY ARTERY, TIED IN THE SECOND PART OF ITS COURSE.

On the 8th of September, 1850, I was requested to see a patient five miles from town, who, fourteen days before, had been stabbed in the chest, had lost a considerable quantity of arterial blood at the time of the injury, and had had two bleedings since. I found a young man nearly eighteen years of age, with a wound not half an inch long, four inches from the left nipple, and three and a half from the upper part of the sternum, and three inches from the clavicle. There was then no hæmorrhage, but a good deal of swelling and tension about the wound from effused blood.

On the 9th, he was brought to St. Mary's Hospital. The wound was in the same state; there was a good deal of pulsation felt, not dilating the wound, but as if conveyed by the swelling from below. The pulse was the same at both wrists. There was a good deal of pain in the left arm and forearm, and numbness at the elbow.

As it was doubtful what vessel was wounded, it would have been injurious to interfere by examination while there was no bleeding. The course determined upon was to give, by delay, every opportunity for a fortuitous closure of a small vessel, and, if the bleeding recurred in any amount, to cut down upon the bleeding vessel, and secure it. If the vessel was divided close to the axillary, it might be necessary to treat the main artery as the wounded one, and tie also the distal parts of the wounded vessels,—if the vessel were wounded at some distance from the trunk, to tie both ends.

Sept. 11th.—Considerable purulent discharge from the wound.

12th.—At 3 a.m. lost about one ounce and a-half of blood, which flowed in a gentle stream, of a bright red colour, and very thin, more like coloured serum. Previous to the bleeding, the parts around the wound became very tense. He says he felt a pulsation in the wound at the time, and a severe pain at the wrist joint, which was relieved by the bleeding. The hæmorrhage was stopped by pressure continued for a few minutes.

On the 13th, there was a copious purulent discharge from the wound. Still pain in the wrist. General health good.

On the 14th, discharge of the same character. Pain in the wrist most excruciating last night, but at present is easier; it extends over the whole joint. The tumefaction around the wound is less.

At 7 a.m. of the 15th, hæmorrhage of a decidedly arterial character took place; it ceased on pressure being made, but recurred again, and was also stopped by pressure. At the time, there was a very strong pulsation in the swelling around the wound. Pulse 96, short and jerking. Countenance more pallid than before. During the day, hæmorrhage occurred again twice, and he lost about ten or twelve ounces of blood in the four bleedings.

On the 16th, he complained of pain in the wound, as if there were needles pricking him. The pulsation is very perceptible in the swelling. Face paler. The arm was gangrenous at its inner part along the upper third, triangular in shape, its base at the wound, and the apex downwards. It was clear that the axillary artery had been cut, the vein, and some of the nerves.

It was proposed to remove the limb at the shoulder-joint, and as soon as it was light I removed the arm, making a flap from the deltoid. Very little blood was lost. The ligature gave way in tying the vessel, or there would have been scarcely any. There was only one other ligature used.

The parts were loosely brought together, on account of their unhealthy condition forbidding the hope of union. The case proceeded well. During its progress there was inflammation in the opposite shoulder-joint, which required caustic issues; but the man made a good recovery.

The mortification in this case arose from the necessary pressure to restrain such a bleeding constricting the superficial vessels, not from the division of the main artery, which is clearly shown by the state of the arm as compared with the condition of the hand and forearm—that nearest the heart gangrenous; that furthest removed, alive.

CASE OF WOUNDED AXILLARY ARTERY REQUIRING AMPUTATION AT THE SHOULDER-JOINT.

Friday, August 6, 1841.—I was sent for before six o'clock, by Messrs. Rowe and Wren. Upon my arrival I found the patient, aged 21, with a wound in the right axilla, into which a compress had been thrust, and I was told the following history of his case. On Tuesday, about noon, he was in a whale-boat, leaning over its side, holding on a rope; a whale lance was lying in the boat with its point directed towards his right axilla, and a man having accidentally kicked it, it entered the armpit; his hand immediately relaxed its hold and fell; he turned round, fell back, and instantly lost in large gushes, two quarts of blood; a quart jug below him was filled immediately. His captain bound up the wound, and he was taken on shore to a medical attendant attached to a party at work near the spot. He was still slightly bleeding, and when got on shore lost a great deal more blood, which, as he was lying on his left side, ran into his mouth and nearly choked him; this happened while the medical attendant tried to stop the hæmorrhage. The part was firmly bound up, yet during the night he lost more blood, was bound tighter, but the wound bled still at intervals. On Wednesday, it blew too hard to allow of his removal to Hobart Town. On Thursday he left in a boat; and lost but little blood in the passage of fifty miles, as he was exposed to the wet, and it was a cold day. The hæmorrhage recurred soon after his arrival, on getting warmer. When Messrs. Rowe and Wren examined the wound, it bled most profusely for one or two gushes, and they stopped it with a piece of calico plugged into the wound. He was much exhausted, and the least movement produced syncope; the hand was powerless, the only movement he could make was a feeble contraction of the biceps; there was not any pulse at the wrist; the hand, forearm, and two lower thirds of the arm were quite insensible to the touch; the hand and forearm preserved their natural colour, and were not much cooler than the left. The upper arm was swollen, and from the axilla, half way down, there was a crepitating sensation. At the anterior part of the axilla, near the edge of the biceps, was a wound, about 2½ inches long, where the lance had entered, passing upwards obliquely towards the glenoid cavity of the scapula. Tongue coated; pulse 120. On the 17th, hæmorrhage took place twice between the hours of midnight and eleven a.m., at the last bleeding forcing some thin coagulum to some distance out of the wound, and requiring the constant pressure of a finger to restrain it. It was decided to operate at once. Dr. Agnew and Mr. Henry Butter, who had both advised with me on the case, ably assisted me in the operation. There were also three pupils present. The man was placed in a horizontal position, and put under the influence of chloroform. The subclavian was pressed upon by Dr. Agnew. I introduced a probe into the wound, which passed deep into the upper part of the axilla; an incision was then made from the lower part of the wound through the anterior fold of the axilla, and the large pectoral was cut through. The incision was continued nearly two inches above the wound; this opened into the cavity, which was cleared of the coagulated blood. The artery during this part of the operation gave out a good deal of blood, and once or twice in very strong gushes. Some more dissection laid bare the axillary nerves and vein. The effusion of blood, and the discoloured state of the parts from the detention of blood among them, together with the important parts concerned, rendered this a difficult and tedious part of the operation. A finger passed above the brachial

plexus led into a cavity below the lesser pectoral muscle, which had been perforated by the stab. The difficulty was, to get to the spot without injury to the vein; for, collapsed as it was, and altered as the muscular fibres were in appearance, it was difficult to distinguish them—that is, it was difficult to know if you cut the muscle whether you might not wound the vein also,—all this dissection was principally done with the handle of a scalpel, was very troublesome, and the bleeding, requiring the frequent cleansing of the parts, rendered it protracted. At last, the vessel could be commanded by a finger behind the plexus; the nerves were more exposed, and the outer branch of the median receiving an impulse from the artery, and being discoloured, was supposed to be the vessel; but on repassing it between the fingers the hæmorrhage was not commanded; the blood flowed freely from behind, whether from the artery itself or from a branch it was impossible yet to say; it was still to be followed, and the lesser pectoral was partly divided. In doing this, a branch passing into the axillary vein was divided, and required a ligature. After dividing these muscular fibres, I was able to place my finger behind the wounded part of the artery, and was, for the first time, secure of the bleeding points, and had the satisfaction of finding, that I could effectually control the hæmorrhage. The artery required to be separated from the nerves, when its colour, position, and impulse, clearly showed what it was. The remaining steps of the operation consisted in passing two ligatures round the artery; one on the lower part of the middle course of the artery, where it is covered by the smaller pectoral; the other just below the lower border of that muscle, including about an inch of the vessel. It was necessary to hook down the upper branch of the median nerve, and pass the ligature from above downwards.

One great difficulty arose from the artery being injured at the posterior part; the knife must have passed behind the vessel, and then have entered it. The bleeding orifice never presented itself; but, on the removal of pressure, deluged the parts with blood.

The operation lasted nearly an hour, during which time the patient was under the influence of chloroform, of which he inhaled ʒiiss. He lost about two pounds of blood. Sutures were applied, and he was removed to bed. A piece of wet lint was placed over the wound. At 4 p.m. he complained of great pain in the wrist-joint; coldness of the extremity, thirst, soreness of the throat; feet cold, pulse 130. At 8 p.m. the arm still cold, wrist painful, with a tingling sensation in the fingers; the arm was dusted frequently with flour. At 10 p.m. the arm began to resume its natural warmth; the lower extremities, which have been cold since the operation, have also become warm; hot water has been applied to them; pulse 120, fluttering.

18th.—Arm warm, but devoid of sensation; wrist still painful. Beef-tea; enema.

19th.—Slight sensation in the hand; wrist less painful; pulse regular, 108. The enema required repetition. Appetite returning. Slept a little to-day.

21st.—Slept well during the night; wrist almost free from pain; some feeling in his arm, but sometimes loses it; countenance more healthy-looking; tongue white; pulse 108. Has taken nourishment. At 2 p.m. the sutures were removed. Considerable discharge of fetid pus; wetted lint applied to the wound.

23rd.—Some tumefaction in the arm; sensation not improved; pulse 108.

29th.—The lower ligature came away to-day, the twelfth after the operation.

October 7th.—The upper ligature came away in the dressings, the twenty-first day since the operation. Still has soreness in the hand.

On the 8th, the wound was brought closer together by a bandage.

13th.—Wound granulating.

21st.—Can move the limb up, and has slight power in the forearm and some fingers; the thumb and forefinger devoid of sensation and motion, and colder than the other fingers. He was discharged, to attend as an out-patient. The wound healed.

The hæmorrhage, in the first instance, was checked by the pressure of the effused blood, which passed more readily into the cellular tissue of the axilla than out of the narrow and deep-punctured wound; but when the coagula were softened down by suppuration occurring in the cavity formed by them, the blood rushed out unchecked.

CASES OF MALFORMATION OF THE FEMALE SEXUAL ORGANS,

CAUSING DIFFICULTY IN DETERMINING THE SEX.

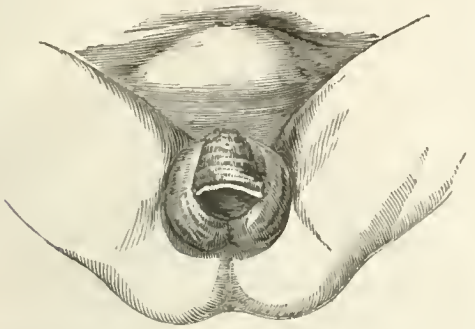
By T. B. CURLING, Esq., F.R.S.,
Surgeon of the London Hospital.

We read occasionally in the journals, not without disgust, of persons described sometimes as hermaphrodites, sometimes as of doubtful sex, but who have been christened males and cohabited with women, and on dissection after death have been found to possess the essential organs of the female. During my professional life I have seen two such cases in adults regarded as males, whose external organs presented appearances analogous to those in the cases I am about to relate, but not having preserved any notes of their cases I cannot further refer to them. I believe that, if the condition of the sexual parts were carefully observed, an error of an unpleasant character might be avoided in many instances; and it is with a view of assisting practitioners in determining a question which may be submitted to them, that I venture to communicate the following cases and dissections.

In December, 1847, some twins, a fortnight old, were brought to me in order to ascertain my opinion of their sex, the genital organs being malformed. I found the following appearances in both infants:—There were two corrugated folds of skin, with transverse rugæ, resembling the scrotum of a male infant before the admission of the testicles. These folds were divided by a cleft without any opening or trace of vagina. Springing from the upper part of this cleft was a body resembling a penis of the full size for a male child at the period of birth, but rather more curved than usual. There was apparently a well-formed glans denuded, the prepuce being thrown back like a hood. The urethra terminated, in one infant, at the root of the glans, as in hypospadias; in the other, the meatus did not reach quite so far. There was no appearance, however, of *corpus spongiosum* below the glans. On introducing a probe, the canal was found to be capacious and its lower wall quite thin. The urine was voided in a jet, as from a penis. No testicle could be detected on either side. Both infants were in other respects well formed, and took the breast well. My first impression was, that the infants were males, the testicles being retained in the abdomen; but, recollecting a preparation in the London Hospital Museum described by Dr. Ramsbotham, in which there is a very similar state of the external parts with a uterus and ovaries, (a) I hesitated in coming to this conclusion. At my request, Dr. R. saw the twins with me, and, though strongly disposed to the opinion that the infants were females, we considered that it was almost impossible to determine the sex positively at so early an age, and we, therefore, advised the parents to give the children names that would be applicable to either sex. The external marks of the male sex seemed to the friends so decided, that, contrary to our advice, they had the infants christened boys. One died at the end of seven weeks, and the other at the end of nine weeks. I examined the bodies, and found an exactly similar state of the internal parts of generation in both. There were no testicles, but properly formed ovaries and a uterus, and also a vagina, which gradually contracted and terminated anteriorly in a short canal, which opened into the urethra close to the neck of the bladder, and at the part corresponding to the veru montanum, there being a similar eminence in the urethra. A probe introduced at the aperture of the urethra could be passed both into the bladder, and through the short narrow canal into the vagina. Just below what seemed the veru montanum, and surrounding the commencement of the vagina, was a body not unlike a prostate in size and form, but which did not exhibit any glandular structure. The continuation of the urethra was evidently formed by union of the labia interna, and the folds of integument resembling the scrotum, by a junction of the labia externa. The parts are preserved in the museum of the

(a) This child was born and christened a boy many years ago in the Brownlow-street Lying-in Hospital. *Vide Medical Gazette*, Vol. XIII., p. 184.

College of Surgeons, and the external appearances are represented in the woodcut.



After I had examined the first child, I came to the conclusion, that, if the second lived, I might probably be able, at some future period, by laying open the spurious urethra and cleft as far as the orifice of the vagina, and by dilating this contracted canal succeed in establishing a communication with the internal sexual organs sufficient for the purposes of the sex, without interfering with the integrity of the urethra.

The mother of these children, who had been greatly disturbed in mind by the malformation of the twins and the mistake made in naming them, was again confined in June, 1849, and gave birth to a child with a similar conformation of the genital organs, except that the monster clitoris more nearly resembled a penis in size. This infant was christened a girl, and died at the age of four months; but I was not afforded the opportunity of examining the body. The mother became pregnant a third time, and was delivered of a well-formed male child.

In May, 1850, my brother, Mr. H. Curling, surgeon at Ramsgate, where I was on a visit, showed me a child with a small mixed nævus on the upper eyelid. He afterwards directed my attention to the malformed state of the genital organs. On examination, I found what seemed to be a fair sized penis slightly curved downwards and lodged in the upper part of a cleft. There was a glans denuded with a prepuce thrown back like a hood behind. There was no meatus urinarius at this part, but a faint groove which ran down and terminated at an oval aperture in the middle of the cleft. On passing a catheter at the opening, it entered the bladder. Immediately below this was another opening, of about the same size, but round, into which I could pass a small elastic catheter for about an inch. The swellings at the sides of the cleft resembled labia rather than a fissured scrotum, and no testicles were contained within them. There were no apertures in the centre of the cleft, or in the perinæum, except the two small openings just described. The lower one I have no doubt communicated with a vagina, and we may infer led to a uterus. The infant was aged two years and a-half, a healthy baby, and the second child of well-formed parents. It had been christened a male. The penis-like body seemed to me to be a very large clitoris. There was no appearance of corpus spongiosum, the glans being formed of the expansion of the erectile cavernous bodies which constitute the clitoris. I recommended the mother to pass a bougie at the lower opening daily, and to retain the instrument in the part for ten minutes or a quarter of an hour, in order to dilate the narrow passage or vagina. This treatment was not persevered in, but two or three months afterwards the mother took the child to another surgeon, who promised to set matters right, and excised the enlarged clitoris.

Although an enlarged clitoris was a prominent feature in the above cases, this enlargement would not have caused any difficulty in ascertaining the sex of the individual, if uncomplicated with other malformations, such as adhesion of the labia and prolongation of the urethra. With regard to certain characters which would tend to indicate that the sex was feminine, it must be remarked, that the absence of any solid body on either side of the external folds of integument is not satisfactory, since, in the male, the testicles are apt to be retained in the abdomen or groin. So also the uncovered glans and imperfect or monk's-hood prepuce cannot be depended on as characterising the clitoris, for we meet with this appearance in hypospadias, a conformation in which the urethra often also terminates anteriorly to the gland, in some instances grooving the under surface of the penis, as of the clitoris in the last of the above cases. By careful examination the absence of a corpus spongiosum may generally, I believe, be recognised, but the diagnostic mark upon which I lay most stress, and which, after the dissection of the twins, led me to express a positive opinion of the sex in the case which I saw at Ramsgate, was the double canal. A second canal below the urinary passage, and in front of the rectum, is never met with in any malformation of the male organs. In cases, therefore, presenting the external appearances remarked in the above cases, the discovery of a canal below the urethra, either opening separately in the perinæum, or branching off from a common canal, opening externally, will be sufficient to enable the practitioner to decide satisfactorily on the sex being feminine.

CASES OF SCIATICA AND NEURALGIA,

SUCCESSFULLY TREATED BY ACUPUNCTUAE.

By H. S. BELCOMBE, M.D.,
Senior Physician to the York County Hospital.

As magnetism, galvanism, and the phenomena relating thereto, and its effects upon the human system, seem at present special objects of research, I take the liberty of sending for insertion in your journal a few cases of painful disease, where the success of the treatment, to my mind, was principally due to the use of a remedy by no means old in this country, and received with much favour when first introduced by Dr. Elliotson, but which seems now to have fallen into disuse, at least I never hear it proposed in consultation, and the last edition of Dr. Watson's lectures, which I understand is a text-book both in London and Edinburgh, makes no allusion to acupuncture, except for the relief of anasarcous swellings.

I must premise that there has been much rheumatism and neuralgia in this part of the world, but I have reason to believe that I am the only practitioner who has directed the employment of the remedy. Without further preface I proceed to a plain narration.

Case 1.—A lady of fortune, aged 65, stout, full habit, partial to luxurious living, but a water drinker; indolent as to exercise, except in a carriage, was attacked early in the spring with severe pain across the loins, shooting down the thighs, causing great inconvenience night and day. The bowels were confined; urine moderate in quantity; turbid. The means used gave very partial relief; presently the pain centred just between the tuber ischii and trochanter major, darting down to the knee and ankle; spasmodic action of the calf of the leg, sometimes very great. A needle was inserted just at the seat of pain to some depth, and another two inches lower in the same direction. Both were kept in for two hours and then withdrawn; the pain entirely subsided, and has not hitherto returned.

Case 2.—A retired tradesman, aged 70; very corpulent; moderately active; fond of the pleasures of the table, but sober. Symptoms much the same, only the pains resembled more the neuralgic tic, and rest was impossible. The needles were introduced three different times before success was obtained; but when obtained it was complete.

Case 3.—A butcher, middle-aged, tall, stout, plethoric; very active in his pursuits, very moderate in his diet. The pains first commenced in the loins, then the shooting down the thighs, preventing his going to market or attending in his shop; then the concentration in the sciatic nerve. The needles completely relieved the pain after one insertion.

Case 4.—A married lady, in easy circumstances, aged 45; no family; very active in her mode of life, very temperate in her living, yet inclined to corpulency; for two years she had been seldom free from this vexatious sciatica, rendering her existence very uncomfortable. Many measures had been tried in vain for relief, and it was only by the effect of persuasion she was induced to consult me. The insertion of the needles was attended with complete success; the pains have not hitherto returned, and her movements are as free and easy as in youth.

I might add three more cases, where the disease was situated in the nerve of the upper extremity, though the effects were most sensibly felt in the wrist, the pain in the

shoulder being only casually mentioned or thought of. The insertion of the needles has been always successful. In these, belladonna plasters were also applied to the wrists, though more I think to gratify the patients, who were resolute the seat of disease was there, than from any expectancy I had of relief, though in many cases I have full confidence in the remedy. One case I may mention. A countryman had a paralytic seizure two years back, which deprived him of the power of speech, though the limbs perfectly recovered. I was sent for lately early in the morning. I found him incapable of using his right arm, which seemed to hang motionless, and his friends were persuaded he had had a paralytic attack in the night. From learning somewhat of the history, and examining attentively the limb, observing there was a more clonic spasm than paralytic degeneration, I was certain it was rheumatism, and had a belladonna plaster placed upon the shoulder and muscles of the neck. Other medicines, I think, were calomel and opium. The intelligent countenance, the clear eye, following me attentively as I made my examination, strengthened my judgment as to the nature of the attack. He recovered very shortly.

The medicines I gave in all the cases of sciatic lumbago were acetate of potash in compound infusion of senna, the patients finding much relief from the movement of the lower bowels, and pressure being taken off the kidneys. In the neuralgia of the upper extremity carbonate of iron in full dose was given.

The different medicines were given with a view of testing their peculiar operation. I am of opinion that full purgation is very useful in all cases of rheumatism, especially in the acute; and that it is more useful where the lower extremities are attacked than when the distress falls upon the upper. The carbonate of iron is certainly an excellent remedy where the chronic form prevails. Many years since, I had an epistolary controversy with a Stafford physician on the subject, which appeared in the medical periodicals of those bygone days; but, as he answered not my last letter, I claimed to myself the victory, as remaining on the field; and the practice I have pursued has only corroborated my judgment. The *ratio medendi* I have nothing to do with; I have only to observe, that sound physiology will always lead to proper modes of practice; whereas theoretical ideas will lead to very unsafe conclusions. My meaning may be thus expressed in other words: There is often a condition of the system which may appear inflammatory, it is only irritative: apply depletory measures, you increase it; waiting awhile, and observing that inflammation does not increase,—for it is its sure character to proceed,—you may then trust to your more nervine, or, if you please, tonic remedies. Assuredly there are remedies well adapted for the relief of most disorders which affect our system;—how to apply, when to apply, is the wisdom of medicine.

Dr. M'Culloch wrote two large volumes to prove that malaria was the cause of all neuralgic diseases. I have read them attentively,—have observed, I hope, accurately—but I cannot agree with him. I think much of this disease may arise from mode of life, variations of temperature, internally and externally; sudden changes, such as we have experienced lately. At all events, the cases I have narrated were neither in confined situations nor subjected to such localities, and they were all isolated, that is to say, individual—I had not two cases in the same locality, nor were any of them near the Foss, which is a condemned quarter of our city—unjustly, to my mind; for the hospital is near to it, good houses are built and building in its vicinity; nor am I aware of any of the peculiar diseases of malaria particularly noted there.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

LONDON HOSPITAL.

By NATHANIEL WARD, Esq., F.R.C.S.

THE DOUBLE FLAP OPERATION.

In the performance of an operation, it is as well, if possible, to act on certain general principles, deviating from them only in instances of local peculiarity. By so doing, simplicity usually characterises the proceeding, its different steps are gone through with greater precision than otherwise, and the results are generally more satisfactory to the surgeon, and favourable to the patient.

Thus, for instance, in the division of the integument, it is a recognised rule to cut through it, when in as great a state of tension as admissible; for by this means the incision is easily effected, and is smooth and even. Amputation of the breast is a familiar example of this rule being acted up to. Now, it is clear, that if a contrary course to that usually recommended in this operation were adopted, as clean an elliptical incision round the base of the diseased organ could not be effected; for, in making the lower after the upper semilunar cut, a greater difficulty would be experienced in rendering the integument tense, in consequence of the dragging of the breast downwards, the tendency of which would be to relax the skin, which is to be divided in the second part of the operation. Independently of the division of the integument when in a state of comparative tension, further advantage is gained by making the lower incision first, namely, that the trickling of blood in the first part of the operation does not interfere with its subsequent steps.

Another principle of great importance to be always borne in mind, and acted on if possible, is, that, after the removal of this or that diseased structure, any undue amount of traction and pressure on the soft parts in immediate relation to the part operated on should not be had recourse to; just apposition of contiguous raw surfaces, together with careful support, being the required conditions.

It would appear that the above general principles have been deviated from in the double flap amputation, as ordinarily performed. This mode of amputation is thus described by Mr. Liston, and is that generally had recourse to. "The surgeon places himself on the tibial side of the right limb, on the fibular side of the left; and, everything being ready, he lays hold of the soft parts on the interior aspect of the bone, lifts them from him, enters the point of his knife behind the vena saphæna; in operating on the right side, passes it horizontally through to the bone, carries it closely over its forepart, and brings out the point on the outward side of the limb, as low as possible; then, by a gentle and quick motion of the blade, a round anterior flap is completed. The instrument is again entered on the inner side, a little below the top of the first incision, passed behind the bone, brought out at the wound on the outside, and directed so as to make a posterior flap a very little longer than the former. The anterior flap is merely lifted up after it is formed, but now that both have been made, they are drawn well and forcibly back, while the surgeon sweeps the knife round the bone so as to divide smoothly the muscles with which it is immediately invested." Now, the deviation from the principles above alluded to, consists in making the upper flap before the lower, and in making the latter longer than the former. In the formation of the upper flap by the transfixion of the soft parts in front of the bone, it is true that the integument is divided when in a state of tension, and a clean unjagged border to it usually results.

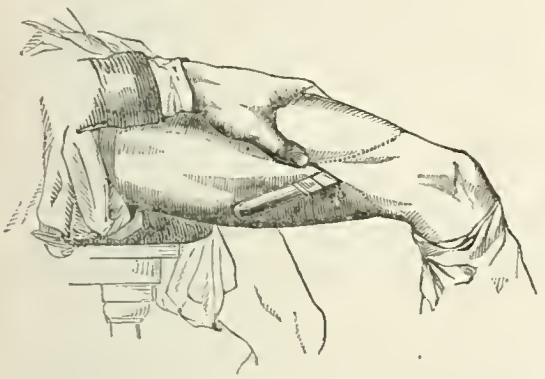
The upper flap having been made, and the continuity of the integument interrupted, the skin behind the bone is no longer tense, but becomes relaxed, being as it were dragged down by the soft parts which it surrounds. In making the lower flap,—unless the hand of the operator be very large, so as to be able to grasp the limb, and make tense the integument, by drawing the soft parts behind the bone upwards,—the skin will be as it were carried to a certain extent before the knife, and an irregular border will probably be the consequence. Independently of this inconvenience, the trickling of blood downwards, after the formation of the upper flap, will interfere somewhat with the formation of the lower.

The operation completed, a good deal of traction (by long strips of plaster or otherwise) must be made, in order to maintain the lower flap in contact with the upper. This has a tendency to induce, by undue pressure, an amount of inflammatory action more than necessary for the healthy union of the opposed flaps, and to keep in matter which otherwise might have a free escape.

How, then, are these inconveniences in the double flap amputation, as usually performed, to be obviated? Simply by making the lower flap first; and by making both flaps equal. To effect this, the operator, whether intending to remove either the right or the left limb, stands on the right side of the patient, and consequently on the fibular side of the right limb, and the tibial of the left. He places the left hand on the thigh above the part to be operated on; then takes a profile view of the limb, and inserts the amputating knife midway between its anterior and posterior surface. It is passed quickly, transversely, to the opposite side of the limb; and by being inclined neither backwards nor forwards, is made to emerge at a point corresponding to that at which the instrument was passed in. The knife is then carried downwards and forwards, so as to make the lower flap, which, in consequence of

its having been formed during the tension of the integuments, is perfectly even. The upper flap is then proceeded with, and is formed in a reverse manner to the lower. The knife is swept round the integument, commencing a little anterior to the point of emergence of the knife in the first steps of the formation of the lower flap, and terminating a little in front of the point of entrance, the incision corresponding in form and length to the incision of the skin in the lower flap. Two sweeps of the knife obliquely backwards are sufficient to divide the subcutaneous muscles. The lower and upper flaps thus formed, are held back by an assistant; the knife is then swept round the bone (in the angle between the two flaps) so as to divide the muscular fibres which are in immediate contact with it, and the investing periosteum, and the saw applied. Thus far the operation is complete.

The two flaps being thus equal in length, and having their bases equal, and their borders even, can be applied easily to each other without the use of any undue traction, and the line of incision is such as to allow of the free egress of matter that may collect between them, supposing them not to unite by primary adhesion. On the cessation of hæmorrhage, the two flaps are brought together by sutures, and supported by a compress above and below, maintained in position by a few strips of plaster and a turn or two of a roller. The application of the compresses is a matter of considerable importance; the object in their use being to apply a sufficient amount of support to keep the whole of the opposed surfaces of the flaps in mutual contact. With this object in view, their size should be so regulated as to be applied over the entire surface of each flap, but not on the extremity of the bone in the angle between the flaps. The following diagram, by Mr. Debenham, points out the method of operating.



This method has been had recourse to for several years at the London Hospital, and was first introduced by Mr. Luke, and has been performed by him and the other surgeons of the institution with considerable success,—a good stump almost invariably resulting. It is not only applicable to the thigh, but also to the arm, forearm, and phalanges of the fingers; the leg, and phalanges of the toes.

Mr. Luke attributes the favourable result that has attended his amputations, in a great measure to the careful application of the compresses. Primary adhesion of the two flaps has frequently taken place throughout their entire extent, and he can hardly call to mind any instance in which such has not been the case to a greater or less degree.

Independently of the advantages I have alluded to, as being connected with this form of operation, another very important one should not be omitted to be noticed. During and after the process of union, the slow tendency to retract on the part of the muscles of the lower flap, brings the cicatrix away from the immediate pressure of the end of the bone when the stump is used; whereas in that operation in which the lower flap is made the longer, the cicatrix is brought opposite to the bone. Whether the operation be performed on the thigh, leg, arm, or forearm, the centre of the limb is always taken as the point at which the knife is to be passed in, without reference to the bone or bones. Sometimes the knife will be passed in nearer to the bone than at others, this depending on the relative muscular development of the part operated on. Thus, in the amputation of the leg below the knee in a muscular limb, the knife will be passed in further from the bones than in a thin limb.

The above are the principal points connected with the *amputation by equal flaps*. I am not aware that it is anywhere described; and, for the reasons mentioned, I think it well worthy the attention of the Profession.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Jan. 24.—Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

—— —— Medical Society of London. *Subject:*—Dr. Tilt, "Clinical Illustrations of Subacute Ovaritis." Eight o'Clock.

Monday, January 26.—Royal Institution. *Subject:* C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock

Tuesday, January 27.—Royal Medical and Chirurgical Society. Half-past Eight o'Clock.

—— —— Royal Institution. *Subject:*—Professor T. W. Jones, "On Animal Physiology." Three o'Clock.

Wednesday, January 28.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.

Thursday, January 29.—Royal Institution. *Subject:*—Rev. J. Barlow, M.A., Sec. R.I., "On the Physical Principles of the Steam-Engine." Three o'Clock.

Friday, January 30.—Royal Institution. *Subject:* — Professor Brande, "On Electro-Magnetic Clocks." Half-past Eight o'Clock.

Saturday, January 31.—Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

—— —— Medical Society of London. *Subject:*—Mr. Henry Bullock, "On Injuries of the Spine, and their Relation to the Urinary Organs." Eight o'Clock.

Medical Times & Gazette.

SATURDAY, JANUARY 24.

DR. DAVEY AND MESMERISM AT THE COLNEY HATCH LUNATIC ASYLUM.

The appointment of medical officers to our great public charities is a matter of very serious importance. They should be men who are not only well educated in their profession, but whose experience will give a certain weight of authority to their opinions; they should also possess quickness of perception, a ready and clear power of discrimination, and, above all, sound judgment; and, in addition to many other moral qualifications, which it is not necessary for us to specify, they should be known to walk in the legitimate paths, and adhere strictly to the recognised, and, we may emphatically add, orthodox principles of their profession. If, instead of adopting this, the prescribed honourable course, the physician or surgeon at the head of a large public institution should condescend so far to forget his trust as to disseminate empirical doctrines,—if he should set about teaching or practising mesmerism, homœopathy, hydropathy, or allopathy, he ought as surely to be deposed from his situation as any clergyman belonging to the Church of England who may take it into his head to declare from the pulpit his belief in the miracles of Prince Hohenloe, or in the miraculous conception of Joanna Southcote. The cases are precisely analogous. All the learned professions are founded and raised upon fixed principles, and those dissentients who find it their interest to desert and undermine these by scattering spurious doctrines abroad, put themselves clearly enough beyond the pale of the profession they originally adopted. Whether this will prove to be the case with Dr. Davey or not, we shall see in the sequel; but we confess that, looking to his career in Ceylon, as described by himself in his book on "Mental Pathology," we have grave apprehensions upon the subject.

In the spring of 1844, under the patronage of Lord Stanley, Dr. Davey went from Hanwell Asylum to Ceylon,

to be Superintendent of the Lunatic Asylum there. Upon his return to England he published a full statement of his views of the pathology and treatment of insanity, and, in so doing, stated himself to be not only a thorough-going phrenologist, but a mesmerist. Soon afterwards appeared the advertisement from the clerk to the Committee of Visiters of Middlesex for the election of two resident medical officers for Colney Hatch. We have reason to know there were nearly 200 candidates in the field, and among them many very highly qualified professional men. From among them Dr. Davey was duly elected. And what has been the result? He has barely enjoyed his appointment one year, when, to our infinite regret, he makes an exhibition of himself (we can call it nothing else) which must be seriously detrimental to his future career, as it is highly derogatory to the profession.

One of those unhappy cases of "Commissions in Lunacy" which so frequently come before our public Courts, is now *sub judice*. The sanity or the insanity of a Mrs. Cumming is to be decided, and, as usual, a host of medical officers belonging to lunatic asylums have been called upon to give their evidence and opinion upon the state of the lady's mind, —among other witnesses Dr. Davey. After describing the particulars of his visit to the assumed lunatic, he was thus cross-examined by Mr. Serjeant Wilkins; and his answers evidently took the Court by surprise.

"Mr. Serjeant Wilkins: Are you a contributor to a work called the *Zoist? I am.*

"Do you believe in mesmerism? *Most certainly, and so do all right-thinking men.*

"Then any man who does not believe in mesmerism is not of sound mind? *He either does not think sufficiently, or is prejudiced.*

"Do you believe in clairvoyance? *I do, Sir.*

"Do you believe that all right-thinking men believe in clairvoyance? *I do.*

"Have you ever effected any cure by mesmerism? *I have cured three persons who were insane by mesmerism.*

"What is your definition of delusion? A belief in that which is untrue. I don't pretend to give a perfect definition of it, but that is the general definition.

"Now, for instance, I am not of a right-thinking mind, because I don't believe in clairvoyance? *That is, because you have not sufficient opportunity of inquiry.*

"Mr. Serjeant Wilkins: Never mind; I should not at all object to break a lance with you upon that subject. *But, you say that the fact of my assertion that clairvoyance is nonsense argues unsoundness of mind on my part?*

"Witness: *To a certain degree.* (Laughter.)

"Then you would say that every gentleman who advances the same thing is to a certain degree of unsound mind?

"Witness: *His mental state is to be pitied; he does not know what is true.* (Laughter.)"

Before going a step further, let us consider what "clairvoyance" means. It is a condition in which the relations of space and time are pretended to be annihilated, so that a person in a state of mesmeric coma can, it is alleged, describe from any given place, what is going on in any distant part of the world. Not to believe in this, argues Dr. Davey, is to betray "unsoundness of mind to a certain degree." Such an opinion, emanating from an unprofessional person, might excite a smile; but when it proceeds from the Resident Physician of one of the largest Lunatic Asylums in the Kingdom, it becomes a very grave consideration whether his authority in so very responsible a position, is not thereby so far compromised as to challenge very serious investigation. A professional man at the head of any large institution, who propounds an unsound opinion upon any subject, will shake public confidence in him; but when he hazards—as Dr. Davey here did—so monstrous a doctrine as this, the visiters of the asylum, the subscribers to its funds, the friends of the patients, the public at large, must feel equally apprehensive lest the mesmeric mummeries of old should here be re-enacted. We do not wish to press hard on Dr. Davey. There are many philosophical and imaginative men who have indulged in fanciful theories which are harmless enough so long as they are confined to their own studies; but when doctrines essentially false, and which have been over and over again proved to have a notoriously demoralizing tendency, are brought to bear on the realities of life, more especially upon the practice of the Medical Profession, then indeed we are called upon with one voice of acclamation, to repudiate them in the strongest terms; and, if necessary, even by appeal to the public authorities. Upon this principle, therefore, we are glad to observe that Dr. Davey's unqualified declaration in favour of mesmerism, was the following day brought under the notice of the magistrates at the Middlesex Sessions, where, after the Annual Report of the Visiters of the Hanwell Asylum had been read, Mr. P. Laurie rose and said:—

"He wished to put a question of great importance to Mr. Rotch, the Chairman of the Visiting Committee of the Colney Hatch Asylum, and also to Mr. Wilkes, Chairman of the Visiting Committee of Hanwell, relating to one of their medical officers, formerly at Hanwell, but who had been transferred to Colney Hatch. He referred to Dr. Davey, and he saw that in his evidence before the Commissioners of Lunacy, in Mrs. Cumming's case, he stated his belief in clairvoyance and mesmerism, and his opinion that every right-minded man entertained the same belief, and that disbelief showed a want of sanity in a man—(laughter)—although he perceived their feelings on the subject, from the manner in which the statement had been received. He also stated, that he had cured three persons from insanity by mesmerism. *As a public officer, intrusted with the sole care of nearly* 500 [N.B. 640, *Report* in *Times*] *pauper lunatics, he thought the public had a right to know whether such proceedings had been carried on in these asylums with the consent of the Visiting Justices. Considering that they contained nearly* 2000 *pauper lunatics, many of them having no friends but the Visiting Justices, the public had a right to know that these poor people had not been tampered with or experimentalised on, and that these asylums were places of mercy, and not theatres for practising these abominable delusions.* Dr. Davey might believe in what he liked, but they were the guardians of these poor persons, and he must confess it was most alarming to him to find a medical officer of one of the asylums expressing these opinions, although he believed him to be sincere in what he said. He wished to ask, therefore, whether the Visiting Justices were aware of anything of the kind, and whether or not the inmates of the asylum were liable to be tampered with or experimentalised on, by any of these abominations?"

In reply to these very pertinent remarks, Mr. Wilkes

"Expressed his satisfaction that the inquiry had been made, and, on the part of the Visiting Committee of Hanwell Asylum, assured them that *no experiments of the nature alluded to had been announced to the Committee*, nor had any such proceeding been sanctioned by them. To the best of his belief, they had neither been made at Hanwell or nColney Hatch."

The assertion, that no such experiments have been reported to the Committee, does not appear to us, as we shall presently show, satisfactory; nay, if the assertion of Dr. Davey, that he has cured insanity by mesmerism, be true, (which we do not believe,) we do not perceive upon what principle he should withhold the same curative mesmeric means at Colney Hatch which he adopted at Ceylon. That some further investigation upon the subject is necessary, is obvious from the concluding observations by Mr. Rotch, who said, he was

"Very much indebted to Mr. Laurie for making this inquiry; and he would answer distinctly and decidedly, that in the Colney Hatch Lunatic Asylum nothing of the sort had been permitted. He was Chairman of the Committee that appointed Dr. Davey. Individually, he could only think, from hearing the report of what had passed on Mrs. Cumming's lunacy inquiry, *that it must necessarily lead to some investigation at Colney Hatch.* He hoped Mr. Laurie would be satisfied for the present with his explanation, that,

as far as the Committee are aware, nothing had been done of this sort at Colney Hatch."

We believe that there is not a more active magistrate on Her Majesty's Commission of the Peace than Mr. Rotch, and we well know that he has been for many years the "*Parens Patriæ*" of the insane poor of Middlesex; but the case is one of extreme difficulty. Here there is a physician who declares, not only his unqualified belief in mesmerism, and asserts that not to believe in clairvoyance indicates, to a "certain degree," unsoundness of mind, but who goes yet further, and insists that cases of insanity may be cured by mesmeric treatment. Either Dr. Davey must abandon his faith or his practice; in either case, the prospect augurs unfavourably for the prosperity of the Colney Hatch Lunatic Asylum.

We are glad to observe that Dr. Hood, the Physician to the Male Department at Colney Hatch, repudiates mesmerism. In a letter to the *Times*, he says: "I beg to assure the public and the magistracy, that neither mesmerism nor clairvoyance is in any way resorted to by me, nor have I any sympathy with their so-called phenomena."

NAVAL ASSISTANT-SURGEONS.

The cause of the Naval Assistant Surgeons progresses. It will no doubt be a subject of congratulation to the gentlemen in the Service to know, that Admiral Houston Stewart, one of the Lords of the Admiralty, and Mr. Montague Chambers, Q.C., both being candidates to represent the borough of Greenwich in Parliament, have promised to insist that the Admiralty Order of July, 1850, shall be carried out in strict integrity and without evasion. We hoped to publish the correspondence that has taken place on this subject between the respective candidates and Mr. T. M. Stone; but, for certain reasons, the naval candidate objects to the publication of his letters. Mr. Chambers, however, states, that the subject to which his attention had been drawn by Mr. Stone, had occupied his thoughts long before he was solicited to become a candidate to represent Greenwich; that it was his opinion the Naval Assistant-Surgeons should occupy a very different position as men of education, competent to discharge such serious and essential duties so intimately connected with the welfare, the safety, and the comfort of the Naval service. "I assure you most sincerely," says Mr. Chambers, "that I am thoroughly convinced of the necessity of the Admiralty Order, and that to the utmost of my power I will afford any assistance I can, as a Member of Parliament or otherwise, in causing it to be carried into execution according to *its true spirit and object*;" and, in conclusion, Mr. Chambers states, that "the condition of the other medical officers must be improved, and placed on a similar footing to their more fortunate brethren in the Army." Fearing he had not been sufficiently explicit, he again wrote to Mr. Stone, expressing his regret that he was not at home when that gentleman called on him, as it would have enabled him to confer with Mr. Stone "upon the most useful way of serving the cause of the Naval Assistant-Surgeons, and glad to have the opportunity of expressing my sentiments, and affording even the most trifling aid in so good a cause."

It is generally understood in Greenwich, that both the gentlemen will be returned to Parliament. This will then be a great addition to the ranks of those members who have already so nobly supported Captain Boldero in his efforts to improve the position of the Naval Assistant-Surgeon.

MEDICAL REFORM.

[At the late hour at which we received the New Medical Reform Bill, as proposed by the Provincial Medical and Surgical Association, we can do little more than merely lay the heads of the various sections before our readers.]

The Bill is entitled, "Draft Bill, to produce Uniformity of Medical Education and Qualification, and for the Registration of those licensed to practise in Medicine."

Clause I. *Repeal of Statutes.*—This clause repeals certain Acts, from the 3rd of Henry VIII., c. xi., to the 6th of Geo. IV., c. 1. sec. 2.

II. *Interpretation Clause.*—This clause is to be inserted when the Bill is completed.

III. *Appointment of the Medical Council for England.*—The Council is to consist of the Regius Professor of Medicine or Physic in the Universities of Oxford and Cambridge; one of the Medical Professors in the University of London; six persons elected by the Colleges of Physicians and Surgeons of England respectively, and also six elected by the Apothecaries' Company.

IV. *Tenure of Office by Members chosen by the Colleges.*—The term to be for three years, but members then eligible for re-election. In cases of vacancy the Colleges and the Apothecaries' Company to elect successors.

V. to VIII. refer to *the appointment and tenure of Office of the Medical Council for Scotland and Ireland.*—These clauses to be inserted hereafter.

IX. *Expenses of the Members to be paid.*—Not exceeding three guineas for each attendance.

X. *Each of the said Councils to elect a President and Vice-President.*

XI. *Each of the Councils to appoint an Examining Body.*

XII. *Provisions as to appointment of a Treasurer, Registrar, and Secretary, and of Clerks and Servants, and for the making of a Seal by each of the said Councils.*

XIII. *As to Registration of Medical Practitioners in practice before the passing of this Act.*—The registrar of each board, until the first day of February, 1853, to register, for a fee of five shillings, the name and abode, with a description of the testimonials of every physician, surgeon, and apothecary applying to be registered, and who, prior to the first day of November, 1852, shall have taken a degree in medicine in any English, Irish, or Scotch University, or who shall state his place of abode and apply to be registered, and shall produce such proof as shall be satisfactory to the said registrars, of his having obtained a diploma, certificate, or licence to practise as a physician, surgeon, or apothecary, dated prior to the said first day of November, 1852, and granted by any English, Irish, or Scotch College or Hall, or any corporation in England, Ireland, or Scotland, legally entitled to grant the same at the time of the passing of this Act, and also to every person who shall apply for the same, and who was actually practising medicine in England and Wales prior to the first day of August, 1815, and who shall sign a declaration according to the form in a schedule annexed; and also to every surgeon and assistant-surgeon of the Army and Navy who shall apply for the same, and whose warrant of appointment bears date prior to the first day of August, 1815, and to every person who shall have been registered as aforesaid, the said registrars shall give a certificate according to the form in another schedule, and which certificate shall be in force till the first day of February, 1853.

XIV. *Every Person not Registered as aforesaid to present himself before the Council of his country for Examination. Licenses to be granted to those duly qualified on payment of a Fee of* 10*l.*—Councils to meet at least once in every four weeks. A person not being registered under the provisions of the thirteenth section, who intends to practise medicine after the first day of February, 1853, shall present himself before the Medical Council for the country in which he intends to practise, and if properly qualified their Registrar shall grant a licence according to the form in Schedule (B), on payment of 10*l.*; and shall also register the name and place of abode of such person, and shall give such person a certificate according to Schedule (C), which certificate shall be in force until the first of February next ensuing; and such person shall be entitled to the name and title of a licentiate in medicine, surgery, and midwifery.

XV. *Candidates for Licences to produce Testimonials to the*

Medical Council, that he is twenty-one years of age; that he has studied medical and surgical science for four years, and that during that period he has passed three years in some University or Medical School approved of by the Council; and that he has attended such courses of dissection, clinical and other lectures, and hospital practice, and has passed such examinations before the Examining Board appointed by the said Council, as the said Council shall appoint.

XVI. *Triennial Medical Congress to be held.*—Three of the members of each Medical Council to form a Medical Congress, for fixing a uniform curriculum of study to be gone through by all candidates for licences, such Congress to meet in London every three years.

XVII. *Registrars to Issue Annual Certificates to Registered Practitioners on payment of a fee of* 20*s.*

XVIII. *All Monies received by the Registrars to be applied for the purposes of the Act.*—One half of the monies received on account of certificates to be applied to the formation of a Medical Provident Fund for England, Scotland, and Ireland; and every person registered under the Act, and certificated during ten years, or his widow or children, shall be entitled to claim relief from the Council out of the Medical Provident Fund.

XIX. *Application of Surplus Income.*—For the founding or establishing of medical scholarships or prizes, or in promoting the advance of medical science and literature.

XX. *Each Registrar to keep a Record of Certificates.*

XXI. *Registered Persons entitled to Practise where Certificates are Issued; and to Transfer their Names to the Register of other parts of the United Kingdom.*

XXII. *No Person to assume the Name of Physician or Surgeon who is not duly qualified.*—If any person shall assume the name or style of a Physician or Surgeon, without being entitled to do so, he shall, on conviction before any magistrate of the county, city, or place where the offence was committed, forfeit a sum not exceeding 5*l.*, nor less than 40*s.*, for every such offence, recoverable within three months next after the offence.

XXIII. *Registered Persons entitled to Charge for Advice and Visits.*

XXIV. *None but Registered Persons to Recover Charges.*

XXV. *Persons not possessing Certificates incapable of Acting as Medical Officers in Public and other situations.*—No person who does not possess a certificate to be capable of holding any appointment in any part of the United Kingdom, in the capacity of a physician, surgeon, apothecary, or other medical officer, in any hospital, infirmary, dispensary, lunatic or other asylum, lying-in hospital, gaol, penitentiary, house of correction, house of industry, parochial or union workhouse, or poorhouse, parish, union, or other public establishment, body, or institution, or to any friendly or other society for affording mutual relief in sickness, infirmity, or old age.

XXVI. *Summary Penalty against Unregistered Practitioners.*

XXVII. *Expulsion of Registered Practitioners for Disgraceful Conduct, or Irregular Practice,*—If three registered practitioners shall complain to one of the Councils that a person who was licensed or qualified, had been conducting himself in a manner calculated to bring scandal and odium on the profession, by publishing indecent advertisements or pamphlets, or immoral or obscene prints or books, or had been guilty of any other disgraceful and unprofessional behaviour, or of any irregular practice, the said Medical Council, or other governing body, are empowered to cite the person before them, first giving due notice, and a full statement of the charges against him; whereupon, if the charges be proved, they are required to erase his name from the rolls of the said Medical Council, College, or other Institution, as the case may be.

XXVIII. *Penalty for the Wilful Falsification of the Record of Certificates by any Registrar.*—Imprisonment for any term not exceeding six months.

XXIX. *Penalty for Obtaining Certificate by False Representations.*—To be imprisoned, with or without hard labour, for any period not exceeding six calendar months.

XXX. *Penalty for Falsely Pretending to be a Medical Practitioner.*—To pay a sum not exceeding 10*l.*, nor less than 40*s.*

XXXI. *How Penalties are to be recovered; if not paid, the Offender may be Committed.*

XXXII. *Application of Penalties.*

XXXIII. *Examiners may take Candidates to Hospitals, &c.*

XXXIV. *Act not to Deprive the Colleges of Physicians in London, Edinburgh, and Dublin, nor the Colleges of Surgeons of England, Edinburgh, and Dublin, of the privilege of conferring Degrees and Diplomas.*

XXXV. *Provision for existing Students.*—For dispensing with such provisions of the Act as shall seem fit, in favour of Medical Students who shall have commenced their professional studies before the passing of the Act.

XXXVI. *Act not to effect the Trade or Business of Chemists and Druggists.*—Nothing in the Act to prejudice or affect the business of a chemist and druggist in the buying, preparing, compounding, dispensing, and vending drugs, medicines, and medicinable compounds, wholesale or retail, without the giving of medical or surgical advice.

XXXVII.—*Registered Medical Practitioners exempted from serving on Juries, Inquests, etc.*

XXXIX. *For certain offences, names of Medical Practitioners to be erased from the Register.*

Then follow four Schedules, as follow:—

SCHEDULE (A).

Declaration required of a person who claims to be registered as a medical practitioner upon the ground that he was in practice as a medical practitioner before the first day of August, 1815.

SCHEDULE (B).

Licence to Practice Medicine, Surgery, and Midwifery.

SCHEDULE (C).

Medical Registration Certificate for 185

SCHEDULE (D).

The Medical Register for [England], consisting of the names and places of residence (arranged alphabetically), with a description of the qualifications, and the dates thereof, of all persons legally qualified to practise medicine in [England], in the year 185

REVIEWS.

Lectures on the Physical Diagnosis of the Diseases of the Lungs and Heart. By HERBERT DAVIES, M.D., Fellow of the Royal College of Physicians; Senior Physician to the Royal Infirmary for Diseases of the Chest; Assistant-Physician to and Lecturer upon Materia Medica at the London Hospital; and formerly Fellow of Queen's College, Cambridge. 8vo. Pp. 288. London: J. Churchill. 1851.

This work consists of sixteen lectures, delivered at the Royal Infirmary for Diseases of the Chest. The author's object in publishing them is twofold; first, to give the student, as concisely as possible, the facts which relate to the theory and practice of auscultation and percussion; and, secondly, "to direct the attention of his medical brethren to the labours of the distinguished school of Vienna, of which Professor Skoda is the acknowledged head and founder."

The First Lecture is devoted to a short account of the anatomy of the respiratory organs,—the author following closely Mr. Rainey's description of the structure of the lungs.

The Second Lecture is occupied with the subject of spirometry. It consists chiefly of an analysis of the facts ascertained by Mr. Hutchinson and Dr. Sibson. The analysis is a good one.

Percussion is treated of in the Third Lecture in a very able manner. The theory of percussion is first given; then the conditions which modify the sound elicited by percussion, and the varieties in tone and quality of the sound. Good rules for practising percussion are laid down, and the objects of percussion clearly stated. In the fourth and fifth chapters the mode of performing and the information gained by inspection and palpation are detailed, and the characters of the normal respiratory murmur and of bronchophony given.

With reference to the latter, Dr. Davies adopts the views of Skoda on the influence of consonance, only he ascribes, he says, a greater conducting power to solid than to spongy lung. Ægophony and the physical conditions on which that phenmmenon depends, are treated at the commencement of the Sixth Lecture.

"I am inclined," says our author, "to the belief, that tenacious secretion of some kind answers the purpose of a vibrating tongue in the bronchial tube, or tubes, in which the sound is produced, and ægophony is, consequently, a species of bronchophony, accidentally modified by this circumstance. We may, therefore, infer

consolidation or compression of the pulmonary substance to be the conditions indicated by this sound."

Abnormal alterations of the respiratory murmur, their characters, causes, and pathological significations, are described in the concluding part of the Sixth, the Seventh, Eighth, and Ninth Lectures.

Dr. Davies considers the column of air contained within the stethoscope to be the medium by which the vibrations of the thoracic parietes are chiefly conveyed to the ear; the vibration of this enclosed air, however, he says, communicated to it by the solid parts of the stethoscope, and not directly by the chest. Original experiments are detailed in support of this opinion.

The seven last Lectures are devoted to the consideration of the heart. With reference to the mode in which the impulse is produced, Dr. Davies gives a pretty full account of the opinions advanced by Skoda, which opinions he advocates strongly; and, after discussing this and other points of physiological interest with reference to the heart and great vessels, he describes the physical signs of cardiac diseases presented on inspection, palpation, percussion, and auscultation.

Speaking of the heart sounds, Dr. Davies remarks—

"A little observation will show that these sounds occur in a certain order of succession—the rhythm of the heart—which is as follows:—

"1st sound—small silence; 2nd sound—long silence, and is commenced and terminated in the interval of time between two successive pulses, in a period equal to $\frac{1}{70}$ of a minute (if we suppose the pulse to beat at the rate of 70 per minute.)

"As the duration of the small silence cannot exceed $\frac{1}{420}$ part of a minute or $\frac{1}{7}$ of a second—a period of time almost incapable of being appreciated by the ear—the second must appear to follow immediately, and without any measureable interval, upon the first sound."

As to the relative duration of the long silence, the first sound, the small silence, and the second sound, he quotes the following passage from Barth and Roger:—

"The two sounds, with the intermediate silence, constitute a beat or rhythm, and to each beat corresponds an arterial pulsation. The result is, therefore, a kind of triple measure, of which the first sound occupies a little less than a third of the time, the short silence and the second sound each a sixth, and the long silence a little more than a third."

And then remarks—

According to the above data, if we suppose the heart to beat at the rate of 70 times per minute then the—

Duration of first sound	=	$\frac{1}{3} \cdot \frac{1}{70} = \frac{1}{210}$	of one minute nearly.
„ short silence	=	$\frac{1}{6} \cdot \frac{1}{70} = \frac{1}{420}$	„
„ second sound	=	$\frac{1}{6} \cdot \frac{1}{70} = \frac{1}{420}$	„
„ long silence	=	$\frac{1}{3} \cdot \frac{1}{70} = \frac{1}{210}$	„

Periods of time so small are evidently, our author continues, beyond the power of the unaided ear to estimate; and, as a consequence, writers have differed much in their statements as to the relative duration of these parts in each beat.

Lately, Volkmann, by the aid of a contrivance described by Dr. Davies, judges the time occupied by the long silence to equal, or almost equal, the time occupied by the first sound, the short silence, and the second sound. We are rather surprised to find Dr. Davies enumerate reduplication of the second sound among the very rare forms of altered rhythm. Our author's observations on venous murmurs are exceedingly interesting; the space at our disposal, however, does not allow of their quotation.

Dr. Davies's lectures will be found most valuable to the student and the practitioner; their style is clear and concise; while the fact, that they imbody the latest views of the Vienna school, as exhibited in the writings of Skoda and Zehetmeyer, recommend them to all who desire to become acquainted with the opinions of some of the best observers and most acute physicians in Europe.

The Medical Aspects of Death, and the Medical Aspects of the Human Mind. By James Bower Harrison, M.R.C.S.L., etc.; formerly one of the Resident Medical Officers of the Manchester Royal Infirmary, &c. 12mo, pp. 165. London. 1852.

"The Medical Aspects of Death" is an excellently-written essay on the signs of death,—the changes the body experiences after death,—premature interment,—the bodily changes which immediately precede death,—the modes in which death takes place,—the way in which the various suicidal agents act in inducing death,—and the signs of dying. Each of these sections is illustrated by well-told anecdotes, and ornamented with most appropriate quotations. The following extract will convey to our readers a good idea of Mr. Harrison's powers and style:—

"The student pictures death in his own manner: he looks upon it as the distant prospect which is to surround him at the remotest period of his life,—the haven and resting-place of his toil,—the slumber and quiet repose which is to terminate the harvest of his days. The father tells his children of a peaceful and a better country, and smooths the pillow of his sick child as he whispers words of consolation and affection. The medical man has fresh in his mind, with all its ghastly reality, the cold image of his once dear friend; he yet hears the choking rattle in his throat, and yet wipes, in imagination, the perspiration from his corpse-like brow. To what result, then, shall we come, after the contemplation of death? To the greatest and the best, the daylight of life is still around us, but the gloom of that night in which no man can work will soon be foreshadowed by sickness, infirmity, and age. Before this night steals upon us, and our ability for useful exertion ceases in the thickening obscurity, let us remember the reality of these things,—and, as we write our characters in the indelible language of deeds that can never be changed, let us remember, also, how soon the story will be told, and the book closed for ever."

The second essay, "On the Human Mind, considered in some of its Medical Aspects," is well written, and will well repay reading. It was originally published in the *Psychological Journal.*

GENERAL CORRESPONDENCE.

TRAINING INSTITUTION FOR NURSES, FITZROY-SQUARE.

[To the Editor of the Medical Times and Gazette.]

Sir,—As a medical member of the Council of the Training Institution for Nurses, in Fitzroy-square, I cannot forbear thanking you for your article of last week. I think it entitles you to the gratitude of all interested in the welfare of the sick. It is, indeed, wonderful, that under the crying evils of the old system, or rather absence of system, exposed as these evils have been by some of our most popular writers, and well known and deplored by the Profession, no means should till lately have been devised for providing a better class of nurses, on something like a definite plan, for hospitals, private families, and the poor, a class of nurses skilled in their peculiar duties, and of unblemished character. How often have the members of our Profession regretted the want of persons, whom they might safely call in to perform those offices for their patients, which not seldom are hardly less important than their own higher functions! But in this country such wants are usually left to be supplied by the energy and benevolence of private individuals. Small and detached efforts are made in the first instance, and it is commonly long before the promoters can succeed in calling attention to the subject, in awakening the public mind to the importance of the interests at stake, and in securing, from the active co-operation of the community at large, that extent and ardour of support which are necessary for supplying the deficiency on a suitable scale.

Having seen a good deal of the Institution in Fitzroy-square from its origin, I may state my belief, that it stands upon a good and secure foundation, and that it will prosper in the long run. Indeed the permanency of the undertaking is in a good measure guaranteed by the fact, that the nurses (now twenty in number), are constantly out, and the demands for their services far more than can be met. The reversion of the sum of 500*l.* has also been presented by a benevolent member of the Committee, as the foundation of a superannuation fund for the nurses. Yet it is surprising how difficult is the task of finding persons able and willing to embark in this kind of occupation as a Profession or calling—persons, I mean, with health and strength, intelligence and character. The nurses are well cared for; they acquire at once a respectable station, and become important persons in the families to which they are sent. The excellent ladies resident at St. John's-house, and who, in the capacity of a Protestant sisterhood, take the liveliest personal interest in the prosperity and well-doing of the nurses and probationers, give elevation and dignity to the association, as well as a real home at times when the nurses are not on duty, or when they are ill. Yet hitherto there have been far fewer applicants for the training which the institution affords than might have been expected; and I cannot help believing that this arises simply from ignorance on the part of the public as to the advantages, or even the existence of the Institution.

You would be doing a great additional service to a very good enterprise if you would allow me to state this want of probation-nurses to the Profession through your widely-circulated columns;

for medical men are of all others, perhaps, the most likely to fall in with persons fit to undertake the office of nurse as a regular employment. In their attendance on the sick they frequently meet with extempore examples of assiduity, vigilance, exact obedience to the directions of the medical superior, good sense, and an obliging and kind disposition—qualities which only need a little education and experience to furnish the requisites of a first-rate nurse. Medical men alone can judge of many of these qualities; and, if they would bear in mind that our institution needs such persons, is willing to educate them, and will afterwards, on proof of competency, affiliate them as nurses, and give them not only regular employment, but all the advantages of an assigned and recognised position in an Institution conducted by a most respectable council, under the auspices of the diocesan, and the management of a clergyman and a body of ladies devoted to this charitable work,—they might most materially serve the interests which the undertaking is designed to promote—the interests of the sick and the dying.

I am, &c. A SURGEON.

DR. RAMSBOTHAM ON MENSTRUATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—I should like to ask the following questions of Dr. Ramsbotham, with respect to his last paper in your Journal "On the Final Cause of Menstruation."

Is it not a fact, that, in many cases, the Fallopian tubes become impervious as a consequence of peritoneal inflammation, and that this circumstance is the cause of sterility; nevertheless the individual menstruates regularly? If this is true, then the ovule cannot escape in the manner he describes, or, if it does, what becomes of it? Does he also mean to say, that, suppose a woman has had sexual congress a few days after menstruation, yet being impregnated at that coition, the ovule so impregnated was the one which escaped at the last menstrual period, and that it will still remain in the Fallopian tubes until the next menstrual discharge resolves itself into a deciduous membrane for its use and benefit, and that the strange delay in an expected labour is produced not by atony of the womb or other causes, but because of the time taken by the ovum to pass into the uterus from the Fallopian tubes, waiting, as he supposes it must, for a deciduous membrane? His paper is most interesting, but is somewhat obscure on those points.

I am, Sir, &c. M.D.

SULPHURIC ACID IN DIARRHŒA.

[To the Editor of the Medical Times and Gazette.]

SIR,—The able paper of Dr. Fuller in your Journal of last week, confirms very much my letter in the *Lancet* of August 30, 1851, when I first published an account of the marvellous effects of sulphuric acid in cholera; but there are two remarks which he has made I do not so positively agree with. He states that the fluids rejected from the stomach are acid. I have never found either the fluid vomited or purged to be acid, but always alkaline, both in the epidemic autumnal cholera, the rice-water evacuations, and the watery evacuations of diarrhœa, not epidemic; of this last class I have not tested many stools. Of course I do not include the fresh contents of the stomach lately taken. It is the watery evacuations I always find alkaline. Fluid ejected from the stomach which the patient has described to be of a sour taste, on applying the test-paper I find alkaline. The other remark is, that the "ordinary bilious vomiting and purging, which have been preceded by derangement of the primæ viæ, are relieved, I believe, by calomel and opium, followed by a rhubarb draught, and by some warm antacid and astringent medicine, as quietly and effectually as by sulphuric acid." At first, when I treated such diarrhœa with sulphuric acid, I myself was a little disappointed in its efficacy; it never failed to relieve immediately, but was not so magical in staying at once the disease; but I soon perceived I had not administered it in sufficient doses, for a patient being attacked with diarrhœa in the middle of winter, after some days sent for me. I prescribed two drachms of the diluted sulphuric acid in six ounces of water; an ounce to be taken directly, and repeated after each motion, or when there was any pain. At my visit the next day, my patient told me the first dose relieved him, but he soon had a slight return of the pain, and that he had taken one mixture at repeated doses the previous evening. He had slept well, but this morning while dressing he felt slight pains in the bowels; he had sent for another mixture and took a wineglassful. Breakfast causing a slight return, he had taken another wineglassful, and previous to leaving home, fearful he might be purged, he had taken another wineglassful, and, finding not more than a table-spoonful remaining in the bottle, he took it also. This was two drachms of diluted sulphuric acid in two hours for a tedious but not acute diarrhœa. My practice had always been to administer twenty to thirty minims at repeated intervals, as the case dictated; but this case emboldened me, and I now, in ordinary cases of diarrhœa, give much larger doses than in epidemic cholera. I have never yet found it fail, nor have I experienced any bad effects from its administration in large doses.

The advantages of sulphuric acid over the usual treatment of calomel, opium, etc., are: The disease is more rapidly checked, the sleep is pleasant and refreshing, the tongue is clean, and the appetite quickly returns, and, except in a few cases, it is not followed by thirst or febrile symptoms. With calomel and opium, the disease is more tedious in duration, the tongue is foul, the head aches, there is great debility, little or no appetite, with a hot, dry skin, a tedious thirst, and the patient requires some other medicine to alleviate these symptoms, which the remedies of calomel and opium have produced.

I conclude by quoting Dr. Fuller's closing paragraph, that "I trust that all gentlemen who have had any experience of the effects of the acid in these cases, will make known the results of their observation." I am, &c.

34, Great George-street, Westminster. T. BUXTON.

[To the Editor of the Medical Times and Gazette.]

SIR,—My father has uniformly for many years employed sulphuric acid(a) in epidemic diarrhœa with never failing success, and seeing it act so wonderfully with adults, I was induced to try it among the children at the Infant Orphan Asylum, where it has been, without exception, most successful. During the cholera he communicated his plan to the medical officers of the Westham Union, with others, assembled to take into consideration what should be done, when they unanimously laughed at the idea. Seeing an article upon it in your valuable Journal by Dr. Fuller, I felt tempted to add our united testimony to his communication.

I am, Sir, &c,

Wanstead. FREDERICK COLLINS, M.D.

FORMATION OF CALCULI.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have read the letter of Dr. J. W. Griffith in your last Number, and must confess that I cannot understand the statements therein expressed. If Dr. Griffith had written more explicitly and less critically; or, better still, if he had condescended to call on me and express his doubts, and see the evidence in support of my conclusions (which I consider to be in no wise invalidated by the arguments contained in his letter), he would have found that I do not labour under the delusion he gives me credit for.—I am, &c.

32, Bland ford-square. JOHN QUEKETT.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the last Number of the *Medical Times and Gazette*, I read with some astonishment two notes from Dr. Griffith; one containing an unqualified condemnation of Mr. Quekett's researches on the formation of urinary calculi; the other, impugning the accuracy of Dr. Inman's observations. I should confine myself to the first of these notes, did not the second contain a statement which really, though unintentionally, corroborates the opinions of Mr. Quekett.

No doubt "the remarkable conclusions" of Mr. Quekett would excite surprise; would bear the "stamp of improbability;" and would appear opposed to all we knew of the nature and formation of calculi before the still imperfect publication of his researches; but it is quite true, as Dr. Griffith remarks, that such considerations must not be allowed to set aside these new views. Nevertheless, Dr. Griffith issues a very dictatorial opinion, founded not on the examination of urinary calculi, but on that of urinary deposits,—than which no two things are more dissimilar in their formation. I would ask Dr. Griffith how it happens, that all persons, for example, are subject to occasional deposits of lithate of ammonia, that such deposits are often constant for longer or shorter periods in the urine of many, while urinary calculi of this same substance are formed in only a small per centage of the entire population? Surely there must be some intrinsic difference between the

(a) The following is the formula:—

℞ Acid. sulphuric. gutt. xv., tinct. opii, gutt. i., magnesia sulph. ℥iss., aqua destil. ℥iss., misce ft. haustus statim sumendus, quarta quaque hora repetandus.

urinary deposit and the urinary calculus, or urinary calculi would be much more common. It follows that a familiarity with urinary deposits by no means guarantees a knowledge of the structure of urinary calculi.

The account given by Dr. Griffith of the behaviour of the calculus deposit from the urine of the horse is of so curious a character as to render it absolutely incredible. It seems that what is affirmed to be an organic cell-wall resists a red heat; that its contents are soluble in weak acetic acid; that it and its contents are wholly soluble in strong acetic acid; that, when exposed to the blowpipe flame it first dries, then blackens, the organic portion is driven off, and the residue becomes perfectly white; finally, that, if the white residue be treated with (weak or strong?) acid, the cell walls are seen "as perfect as ever."

I would ask Dr. Griffith the composition of this so-called cell-wall, which exhibits such a curious series of re-actions. It cannot be carbonate of lime, of which the contents of the cell—I beg his pardon, the minute calculus—is evidently composed, for that is readily soluble in very dilute acetic acid; neither is it probable that the cell-wall is composed of phosphate of lime or silica, whereas we are well aware that strong acetic acid dissolves the cell-walls of the ordinary nucleated cells of animals.

Feeling interested in this question, I obtained a specimen of the deposit, and subjected it to microscopic examination, with the following results:—Placed in plain water, some of the forms figured in a late number of your Journal were at once seen, either as single, rounded, or angular masses, or groups of these masses aggregated together. When treated with weak acetic acid, there was an abundant extrication of air-bubbles, which could be nothing else than carbonic acid, and the gradual solution of the masses took place from the circumference to the centre. After some portion of the mass was thus dissolved, a delicate line, exactly resembling the outline of a cell, was seen, and when the whole of the carbonate of lime was removed, the residue exactly resembled a mass of cells in outline and general appearance. But the convincing proof, the residue undissolved by the acid, consisted of organic cells, was that a number of these presented distinct nuclei and nucleoli. There is a source of fallacy in Dr. Griffith's experiment of heating the deposits to redness, which he has probably overlooked. It seems, from his account, that he heated the moist deposit, for he says, that it first dries, then blackens, etc. Now, it is extremely probable, that in the process of drying and heating, the bubbles of gas produced by the evaporation of water and decomposition of the organic matter would actually form a sort of cellular mass, and if the carbonate of lime were not afterwards completely dissolved out by the weak(?) acetic acid, a fallacious appearance of cells and cell-walls might be produced.

Dr. Griffith asserts, in a preceding paragraph, that he can at will manufacture the so-called cell-walls by a chemical process of which he gives a very insufficient description. If the doctor can make a nucleated cell such as I have seen, containing the calculous matter, he has solved one of the highest mysteries of organization, and placed himself among the greatest discoverers of our age. But, Sir, Dr. Griffith, in his remarks on Dr. Inman's paper, virtually but unintentionally concedes the whole question, by the admission, that urates may be admitted in a state of solution into cells of various kinds, and subsequently precipitated within these cells, and he plumes himself on this as a discovery. Unfortunately for him, however, this observation precisely coincides with the statements given in Mr. Quekett's concluding lecture on Histology. If we substitute carbonate of lime for lithates, we have an exact description of the minute calculi from the urine of the horse; for no one could be so stupid as to imagine that the carbonate of lime gains admission into the cells, except in a dissolved condition.

I think, that before Dr. Griffith is in a position to affirm that Mr. Quekett's observations (which, I may observe, have been conducted with very great care) are a delusion, it is incumbent on him to demonstrate the composition of his cell-wall capable of resisting a red-heat, but soluble in strong acetic acid; and also to give to the public a more minute description of his method of making this cell-wall artificially, in order that his experiments may be repeated by other competent observers. For myself, I am satisfied by observation, that the nodular masses of carbonate of lime forming the minute concretions in the urine of the horse, are contained in true organic cells, many of which still retain their nuclei.—I am &c.

PH. B. AYRES, M.D., M.R.C.S. Eng.

Wandsworth-road, Jan.

LITHATES IN URINE.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your Number of January 10, I find a letter from Dr. Griffith, relative to a former communication of mine, which he appears to have misunderstood.

I stated, that lithates in the urine were described as occurring under two forms,—minute granules, which were common; and large granules, which were rare. (The globular crystals of lithates, referred to by Dr. Griffith, few microscopists would describe as large granules.) I recorded, that I had met with one specimen of urine in which the lithates existed only in the form of large granules; and that I found this to be due to the incorporation of the salt with confervoid spores. The fallacy pointed out was, that a deposit might be spoken of as lithate of ammonia occurring in a larger form than usual, when, in fact, it was only masked by the influence of vegetable organisms. I registered the fact, that other observers might have their attention directed to the point.

If Dr. Griffith has already published a similar observation, I can only say, that if I had known it, I should not have thought it necessary to have recorded my own.

It would serve no useful purpose to defend myself from the accusation that I do not know how to discriminate spores from starch, large granules from globular crystals, and whether particles are within or without a cell membrane.—I am, &c.

Liverpool. THOMAS INMAN, M.D.

POISONING BY ARSENIC.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the *Lincoln, Rutland,* and *Stamford Mercury*, of January 2nd, a case of poisoning by arsenic is reported. The facts are these:—"A boy, aged 5 years, entered the house of a relative, where he saw a large thick slice of bread and butter on the table, and being hungry, he eagerly eat more than two-thirds of it before he was discovered. It had been poisoned with arsenic for rats. All the usual symptoms supervened. Mr. Tuxford, surgeon, of Boston, Lincolnshire, was called in, and after some hours of care and attention the child was out of danger. The paper then states, that about fifteen grains of arsenic (?) had been swallowed.

I would ask you, Sir, if such a case as the above has been ever known before,—that a child only five years old should quietly chew and swallow food with fifteen grains of arsenic and yet recover? Not for one moment do I intend to say such was not the case, if Mr. Tuxford, the surgeon, will verify it; and, if he will kindly do so, would he at the same time give an outline, however brief, of the symptoms and treatment. Thus I am sure would he confer a favour on the medical world; for one fact in practice is worth a thousand theories, however much some learned (?) members of our Profession are fond of theorising.

Your insertion of this note will be esteemed.—I am, &c.

DEVIZES.

THE MEDICAL BENEVOLENT COLLEGE AND IRISH PRACTITIONERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have watched with deep interest the progress made in behalf of the "Medical Benevolent College," and I need scarcely say, that I rejoice in the deep interest taken by every section of the Profession in England to secure its establishment. My principal object in addressing you is to ascertain, whether, in the event of the medical practitioners of Ireland contributing toward the founding of the Institution, the same privileges will be afforded to their children, widows, etc., as to British contributors? The Kingdom is supposed to be "united," and I can see no reason why Irish surgeons or physicians should be excluded from participating in the benefits of such an admirable Institution, provided the support from Ireland be commensurate with the claims. Struck down as the majority of the Profession has been here, by many casualties, for some years, I still think there is sufficient energy among them to afford subscriptions or donations towards the College, with a view to the education of their children. I would therefore, with great respect, suggest to the Committee of the College, their making known their intention on this subject. I feel quite convinced that Mr. Propert would have no objection to the extending the benefits of the Institution to Ireland, on the conditions above named.

Cork. I am, &c. PHILOS.

THE "MEDICAL CIRCULAR."

[To the Editor of the Medical Times and Gazette.]

SIR,—About three weeks ago, a gentleman of the name of Mr. George Ross, of 24, Farringdon-street, called on me, stating that

he was about to edit a medical journal, to contain the current medical news of the day, and a biographical sketch of the members of the medical profession, and soliciting contributions and a sketch of my own life. I told this gentleman that I thought the medical news of the day appeared to me exhibited sufficiently well by the respectable journals now in circulation; and that as to any biographical sketch, I entertained a decided feeling against parading my own history before the public, as it could not be of the slightest interest to any but my own immediate connexions.

A short time afterwards I received a communication from the editor of the *Medical Circular*, repeating the request, and enclosing a sample of a "Biographical Sketch."

Feeling annoyed at the reiterated solicitation of the editor, I enclosed an answer, referring him to the *Medical Directory* for a list of titles, appointments, etc, I had the honour to enjoy, and declining to afford any biographical sketch.

I was therefore not altogether surprised at the character of the notice which this gentleman has given of my name in the first number of the *Medical Circular*, issued last week.

I make no complaint whatever of his remarks on my "personal conspicuity," or on the shallow physiology displayed in my work on the "Prostate Gland;" and I should not have troubled you with this letter, but that I was anxious to inform my professional brethren, that if they wished to stand well in the opinion of Mr. George Ross, they had better communicate such little incidents in their early life as they may wish the public to be informed on. For my own part, I had rather keep my own private affairs to myself, than have them blazoned forth in the pages of the *Medical Circular*. I am, &c. JOHN ADAMS.

4, St. Helen's-place.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. HODGSON, Esq., F.R.S., President, in the Chair.

REMARKABLE CASE OF FOREIGN BODIES IN THE STOMACH AND DUODENUM, COMPLETE OBSTRUCTION OF THE BOWELS, AND MECHANICAL DISPLACEMENT OF ORGANS.

By JOHN MARSHALL, Esq., of Wallingford.

A tradesman's wife, aged 41 at the time of her death, who had borne six children—the last in 1844—a tall, well formed woman, who had suffered from the following symptoms:—In December, 1842, fourteen days after the birth of her fifth child, she vomited a washhand-basin-ful of blood. For forty-eight hours subsequently she was unconscious; the pupils were dilated, and the pulse hardly to be felt. She recovered slowly, and her complexion always afterwards retained a sallow hue. The last labour, in 1844, was unattended by any similar or other ailment, and she recovered quickly. In the autumn of 1845, she suffered from pain at the epigastrium and in the left groin, accompanied with frequent vomiting. A hard tumour, the size and shape of an ordinary placenta, was found in the left groin, movable in a transverse direction when the patient turned from side to side. This had been felt by the patient for many months; when it moved it caused nausea, but no pain, nor was it tender to the touch. She had pain between the shoulders, shooting into the left breast, and suffered much from flatulence. The catamenia had not appeared for three months, and she thought she was pregnant. The bowels were constipated, the vomiting continued, with occasional mixture of blood in the matters thrown up; she became much emaciated, and so feeble that her death was expected. She recovered, however, after taking nothing but small quantities of brandy at short intervals for two days. She gradually regained strength, and looked almost as well as usual. During the five following years, she continued in tolerable health: the pain and occasional sickness, constipated state of bowels, and occasional œdema of face and ankles, were the principal indications of impaired health. The catamenia had never returned since 1845. In October, 1850, after a return of the old symptoms of incessant vomiting, etc., she sank after an illness of three weeks.

Post-mortem Examination, eighteen hours after Death.—The stomach was found reaching, at its pyloric end, to the arch of the pubes, its form resembling that of a champagne-bottle; the duodenum lay partly under the signoid flexure of the colon; the pancreas was also drawn out of its natural position; the liver was large and pale, and the gall-bladder full of blood. Nothing remarkable was observed in the other organs of the abdomen and pelvis, except that the cœcum and colon were small, and had lost the character of large intestines. No ulceration was to be found throughout the whole length of the intestinal canal, nor any adhesion or other sign of peritoneal inflammation. The stomach contained in its lower half, nine ounces of pins of a purple-black colour, not corroded, all bent or broken, many very pointed. The coats of the stomach were much thickened; the duodenum contained a mass of pins very tightly packed, of various shapes, similar to those found in the stomach, and wholly obstructing the tube. Their weight was about a pound. The husband of the patient had never seen her put pins into her mouth, but her son said that he had observed h's mother biting pins, and believed that she swallowed them; and stated, moreover, that he had occasionally taunted her with the fact, when she corrected him. It appeared that her appetite was always capricious, occasionally very keen; and her sister informed the author that when a child she was in the habit of eating starch and slate-pencil, and that she had seen her biting pins. At seventeen years of age, she had vomited blood, and was ill for some time afterwards.

Mr. Pollock mentioned the particulars of a case where he had removed large masses of hair and string from the stomach and duodenum. [A report of this case will be found in our account of the proceedings of the Pathological Society.]

Dr. Seth Thompson described the case of a girl admitted into the Middlesex Hospital for obstinate constipation of several days' duration, and who was now passing great quantities of hair by the bowels. A consultation had been held to determine on the propriety of an operation; but a few days afterwards the bowels began to act, and she commenced discharging considerable quantities of hair, the same colour as her own. This, from what she stated, must have been swallowed several years ago. There was a small tumour about the site of the ileum. The urine had been freely discharged all the while. She was now considered convalescent, and would probably leave the hospital with very little hair remaining in the intestines.

ANEURISM BY ANASTOMOSIS IN THE ORBIT.—LIGATURE OF THE COMMON CAROTID ARTERY.

By H. HAYNES WALTON, Esq., F.R.C.S., Surgeon to the Central London Ophthalmic Hospital; Assistant-Surgeon to St. Mary's Hospital, etc.

The author showed that Mr. Bell, who first described and named the disease, included under that head other vascular tumours, and several unallied growths. He then passed on to the true nature of aneurism by anastomosis, its characteristic of pulsation, when sufficiently superficial, and arterial *souffle;* and gave the particulars of a dissection of one, which consisted of tortuous arteries, communicating freely, and dilated into sinuses or canals, the walls of which were thin. Allusion was made to want of knowledge of the accompanying veins, and the imperfect method of determining the question by injection alone. The particulars of his case were these:—A girl, aged two months, was brought to the Ophthalmic Hospital, with a prominent globe, without any indication of the true nature of the disease; but when four months old, the eye was more prominent, the conjunctiva was studded with large blood-vessels, and an arterial *souffle* were audible. Pressure lessened the protrusion for a few seconds. These symptoms increased rapidly, and the author tied the carotid artery. Not a single bad symptom followed; and in three days the reduction was so marked that the lids were closed over the globe during sleep. Now, after several months, the child is well, and the eye very nearly like the other. The author dwelt on the fact, that the free anastomosis at such early life was no objection to the operation, because, although coagulation might not occur, there was a partially emptied state of the vessels, till the collateral circulation was fully established; and that the tone of the vessels not being lost, they adapted themselves to their reduced contents, and became confirmed in their diminished bulk. The usual cause of failure in tying the vessels going directly into such tumours was pointed out; the seeming desideratum when the ligature is to be useful being, that the entire region should be influenced, and its vitality reduced. The author objected to the recorded cases of Mr. Travers and the late Mr. Dalrymple being true aneurism by anastomosis, considering them to be common aneurism; he pointed out the difference; and concluded by showing, that when the ligature of the carotid is not in itself sufficient for a cure, it may be subservient to the success of other means, which alone would have been inapplicable or useless. A sketch of the patient was exhibited.

The President said, there were one or two points on which he desired information. First, whether the pulsations of the tumour were detected without the aid of the stethoscope; and, secondly, when the ligature separated, and what kind of ligature was used? It was not within his knowledge that the operation of tying so large an artery had been before practised at such an early age,—four months, he believed. It was important to know that it could be

done successfully. In those cases where *ramollissement* of the brain had been caused by this operation within his knowledge, the patients had passed the middle period of life.

Mr. Haynes Walton said, with regard to the pulsation, he had not been able fully to satisfy himself of its existence, even with the aid of the stethoscope. He himself was not satisfied as to the day when the ligature came away. He thought it separated on the twenty-third day.

The President said, a doubt had been expressed as to whether the cases narrated by Mr. Travers and Mr. Dalrymple were really examples of aneurism by anastomosis. He had attended Mr. Travers's patient after the operation for several years, and he considered the case a mixed aneurism by anastomosis. It consisted partly of sacculated veins and partly of dilated arteries. He had not seen Mr. Dalrymple's patient, but from the account given, the disease seemed to be similar to that in Mr. Travers' case.

Dr. Snow remarked, that he had expected that when the carotid was tied the tumour would diminish in size considerably, but such was not the case. It did so twice under the action of chloroform; but again, enlarged as that influence passed away. It diminished gradually after the operation, but he thought it would have done so at once. He did not know whether the same thing had happened in other cases or not.

The President mentioned a case in which Mr. Travers tied the carotid, and the tumour gradually diminished in size in that instance.

Mr. Barlow said, that he had been struck by the observation made by the President, that most of the cases of softening of the brain which had come within his great experience, as results of tying the carotid artery, had happened after the middle period of life. This fact seemed to point at the existence of more or less arterial disease at the time of the operation. It would be of great interest to examine with proper minuteness, not only the large, but also the small vessels of the brain, in cases of softening from this proceeding. With regard to the changes of the latter vessels, it seemed clear that their fatty degeneration led commonly to softening and apoplexy. He might particularly refer to the researches of Mr. Paget, in proof of the reasonableness of this view. Should the nutrition of the brain be impaired to the extent which a manifest and extensive degeneration of its small blood-vessels would imply, he could not help thinking that the organ would be in a most unfavourable state for so grave an interference with its circulation as the tying of the carotid would occasion.

The President thought that such could hardly be the case, as it had occurred in at least one instance where the artery was tied for a wound; the man died from the ramollissement. In that case, he thought it hardly probable that disease should be going on in the minute vessels of the brain, although it might be so in other cases. His own view was that the ligature of the principal artery caused such derangement in the circulation as to induce the softening by depriving the part affected of its blood,—a change analogous to gangrene elsewhere.

Mr. Streeter inquired what period of time had elapsed between the ligature of the artery, and the death from the softening of the brain, because he had been present at a lecture by the late Sir A. Cooper, where he showed the brain of a man on whom he had first successfully tied the carotid artery, the man dying subsequently from apoplexy, caused by the rupture of the communicating branch, which had enlarged in consequence of the operation. He suggested to Mr. Walton the propriety of watching his case, and of ascertaining the nature of the compensating circulation. This Mr. Walton promised to do.

Part of an interesting and valuable paper on the *Post-mortem* Examinations of Cases of Disease of the Uterine Organs, by Mr. Pollock, was then read; the conclusion was deferred to the next meeting. Some remarks were made by several members as to the advantage to be derived from a knowledge before-hand of the objects of the papers to be read, but the President seemed to say that the difficulties in the way were insuperable.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. P. M. Latham, President, in the Chair.

Dr. Brinton read a report, by himself and by Dr. Bristowe, on

DR. BENCE JONES'S CASES OF SEROUS CYSTS OF THE KIDNEYS.

The kidneys under examination presented a considerable amount of disease. The tubuli were in some cases natural; but in the majority they were more or less altered. Of these latter, some were filled and dilated by an excess of brownish epithelium, the individual cells of which were loaded with granular matter, or distended by distinct refractile molecules of oily-looking fluid. Others were blocked up by blood, in various stages of disintegration, which had doubtless been effused by a rupture of the corresponding Malpighian plexuses; their contents were opaque, granular, more or less tinged by the colouring matter of the blood, and in some cases giving distinct evidence of the presence of blood corpuscles. The Malpighian bodies appeared for the most part healthy; but some, without being materially altered in size, were highly opaque, so that it was difficult or impossible to trace the vessels within them. The opacity was due to a large amount of granular matter, apparently seated between the vessels and their capsules, and most probably caused by an effusion of some of the constituents of the blood. There was an abundance of cysts throughout both kidneys. In almost every section examined by the microscope they were present in considerable numbers; sometimes solitary, but frequently clustered. By careful manipulation, they were isolated, and moved about in the field of the microscope. They varied greatly in magnitude: the smallest being little larger than renal epithelial cells, the largest being about the size of Malpighian bodies. They were all globular or ovoid, transparent, and refractile. In all there was a distinct and perfect wall, and in many it was of some thickness. Occasionally the thickness of the wall was indicated by a layer of molecules lining its interior. The contents sometimes so far varied from their ordinary transparent character as to be faintly granular; and rarely this granularity took on the form of one or two concentric layers, situate a little distance from the cyst wall,—an appearance possibly in part due to the endosmose of water during the examination. The wall of the large cyst from which the fluid that was analysed was taken presented a fibrous appearance, but no epithelial lining could be detected. Some flattened Malpighian bodies and tubercles were visible here and there connected with its outer surface.

Dr. Jenner presented a specimen of

MALFORMATION OF THE AORTIC SEMILUNAR VALVES.

This heart was removed from a child aged nine years. The aortic orifice is guarded by two valves only. It offers a good example of the second form of malformation from defect of development, described by Dr. Peacock, in his excellent report on malformations of the semilunar valves lately presented to the Society. One of the two segments of the valve is considerably larger than the other. The corpus arantii of this larger segment is twice the size of that of the smaller. A ridge is seen on the aortic side of the same segment dividing it internally into two shallow pouches. Neither segment is opaque or thickened; and excepting the malformation, they are healthy in appearance. The foramen ovale is more patent than is usual in a child of this age; but the opening is oblique, and probably no blood passed through it during life. In other particulars the heart is healthy.

Dr. Baly exhibited an example of

RUPTURE OF THE HEART, CONSEQUENT ON FATTY DEGENERATION, AND ASSOCIATED WITH SOFTENING OF THE BRAIN.

Mrs. M. F., aged (at the time of her death) 52 years, was rather above the middle stature, and of fat, but leuco-phlegmatic habit of body. She was in the middle rank of life, was very temperate, had had a large family, and for many years had undergone most severe domestic troubles. On the 3rd of September, 1848, she was attacked with paralysis of the right arm and leg, and loss of speech. The sensibility of the paralysed limbs was not affected, nor was consciousness lost. In the course of a fortnight speech returned, though with imperfect articulation, which was permanent. The power of moving the leg began to return at the end of six or seven weeks, and after three months she could walk with some help. The use of the hand and arm was regained much more slowly, and in a more limited degree. No second attack of hemiplegia occurred; but, at intervals of a few months, she suffered from attacks of pain in the head, with the appearance of balls of fire or flashes of light before the eyes, followed by "visus dimidiatus," one half of the field of vision, and of any object to which she directed her eyes, appearing quite dark. These attacks, which lasted about a week, were usually attended with difficulty or even complete loss of speech. There was no affection of the intellect except slight impairment of memory; but this seemed not to be constant, or it varied in degree. The persistence of some paralysis of the right side of the body, and the general feebleness which had come on during the last few months, make it difficult to determine with certainty whether the more common indications of fatty degeneration of the heart existed; for she necessarily walked very

slowly, and ascended stairs with difficulty. It was, however, her habit to pass the day on the ground floor of her house, while at night she slept on the third floor. She appears never to have complained of ordinary breathlessness or palpitation, and never was known to faint. But latterly she spoke of a sense of oppression at the chest, and a desire to draw her breath more deeply than she found she could do. Her pulse was feeble, and Dr. Baly believes he has occasionally found it intermittent. He examined the action of the heart about six weeks before her death, and found both the impulse and the sounds feeble. On the 25th of November, 1851, she complained of pain in the chest, behind the middle of the sternum. This continued three or four days, and she felt much weaker, so that she did not leave her bedroom. But on the 29th of November she appeared to her family unusually well. On the morning of the 30th she rose about half-past ten, and said she felt very well. Soon afterwards she was standing washing herself at the wash-stand at the side of her bed, when her daughter saw her suddenly throw up her hands without any cry, but with a momentary fixed stare of the eyes, then turn towards the bed, and fall towards it. Her daughter caught her as she fell. She did not move again, or even breathe. Her death was instantaneous. Her face immediately afterwards was very pale, with an exceedingly calm expression. Dr. Baly, conjointly with Mr. Baker, of Bulstrode-street, examined the body twenty-two hours after death. The quantity of fat in every part was great. The skull was of extraordinary thickness; the dura mater and arachnoid membranes in a natural condition, and neither the surface of the hemispheres nor their substance presented any indication of disease. The lateral ventricles contained about six drachms of perfectly limpid fluid. All the parts in the centre of the brain appeared healthy. At the base the arteries were extensively diseased and in an extreme degree, being opaque and rigid, and in parts much contracted in diameter. These changes were by far most advanced in the basilar artery and the branches forming the sides of the circle of Willis; and the parts of the brain supplied by these arteries alone presented appearances of disease. The cruri cerebri at their lower surface were of a mottled slate-grey colour, and, to the depth of a line, softened to a pulpy consistence. The left half of the pons Varolii was obviously flattened and contracted, and, when sliced, showed a considerable loss of medullary substance, and in its place a quantity of brownish cellular substance in a very irregularly-shaped cavity, which extended downwards towards the olivary body and anterior pyramid of the left half of the medulla oblongata. The pericardium contained a large quantity (many ounces) of serum, and a large dark clot of blood, which completely enveloped the heart. The heart itself, firmly contracted, appeared of about the natural size. It had a very large quantity of fatty tissue about its base, in the course of the coronary vessels and their branches, and over nearly the whole surface of the right ventricle. The muscular substance of the right ventricle, where it could be seen, and that of the left also, in the neighbourhood of the septum of the ventricles, had its natural dark colour, with muscular fasciculi clearly distinguishable. But at the prominent rounded part of the left ventricle, over a space of about three square inches, the colour of the muscular substance was a mottled dull yellow, or drab and pink, and no fascicular or fibrous structure could be discerned. In the middle of this part, and just behind the left convex border of the ventricle, there was a rent in the wall of the ventricle, about an inch in length, commencing midway between the base and apex of the heart, and running downwards towards the apex. The edges of the rent were irregular, one in part overlapping the other, and they were separated by a thin dark clot. Below this principal rent, and nearly in a line with it, were two much smaller rents. When the left ventricle was laid open, its cavity was found larger and more nearly globular than natural, it being dilated towards the apex, while its wall had at least its normal thickness. It was at the most dilated part that the degeneration of tissue and the rupture had occurred. A probe passed from without through the rent appeared between the smaller muscular bands at this part. The mitral valves were slightly thickened and opaque. The aortic valves were also thickened, and close to their attached border were rigid from bony degeneration. The rest of the heart was healthy, except the coronary arteries. These presented throughout numerous thickened, opaque patches of cartilaginous or fibro-cartilaginous texture. But they were all of about the normal diameter, and free from obstructions, except one branch of the left coronary artery, running from the base of the left ventricle towards the centre of the degenerated part. This branch, to the extent of three quarters of an inch from its origin, was much enlarged, being prominent on the surface of the heart, and feeling to the finger as large as a crow's quill, and hard. All its coats appeared to be thickened, and were opaque, yellow, and rigid; its cavity was filled with a firm and nearly black coagulum. This dilated portion of the arterial branch ended abruptly, and its canal could be traced no further; it seemed to be obliterated at the very margin of the degenerated part of the ventricle. The arch of the aorta presented on its inner surface a continuous state of mottling, unevenness, and corrugation; and over a considerable space close to the origin of the great vessels was completely rigid. In the abdomen only the kidneys and liver were specially examined. The former were quite healthy; the latter merely presented some unevenness of surface, and some hardness of its substance near the anterior edge.

Microscopical Examination of the Heart.—It should be stated that the muscular substance of the heart generally was somewhat soft, and decidedly greasy. Portions taken from three different parts were submitted to the microscope. In portions from the septum of the ventricles, which to the naked eye appeared the most healthy part, the primitive fasciculi had all their natural characters. Only here and there one presented a chain of fat-like globules running down its middle for a short distance; and a multitude of oil-globules floated in the field of the microscope, having previously, as it seemed, occupied the interstices of the primitive fasciculi. In portions taken from the right ventricle, which had more greasiness of tissue, a few fasciculi had a large accumulation of the fat-like globules in their middle, or narrow chains of them between the fibrillæ; while others had lost the transverse striæ either altogether or in a part of their length, and seemed to be formed of multitudes of minute shining granules, disposed for the most part in longitudinal lines, but of not quite equal size, and of larger diameter than the divisions of the natural fibrillæ. Lastly, portions taken from the sides of the rent in the left ventricle showed scarcely a primitive fasciculus which was not thus altered, and for the most part in a more advanced degree; the longitudinal arrangement of the shining particles being no longer apparent, while in many instances they were so large as to present more obviously the characters of fat globules. In all the specimens large fat globules floated free around the muscular fasciculi.

Dr. Baly remarked, that in this case the original attack of paralysis, affecting the right upper and lower extremities, and the tongue, leaving the face unaffected, and the sensibility of the paralysed parts unimpaired, and not involving loss of consciousness, was obviously referrible to the lesion of old standing in the left half of the pons varolii, and was explained in all its features by the seat and extent of that lesion. The increased impairment of general muscular power during the last few months might be due to the superficial softening of the crura cerebri; while the absence of any diseased change precisely accounting for the recurring temporary affection of vision was to be expected. The extreme suddenness of death, and the immediate cessation of the respiratory movements, rendered it almost certain, before the examination of the body, that the cause of the fatal seizure was to be sought, not in the brain, but in the heart or large blood-vessels. The principal cause of the rupture of the heart was manifestly the degenerated state of the muscular substance at the seat of the rupture. But the diseased appearances found accompanying the rupture in the heart were of the greater interest from their association with the analogous changes which had taken place in the brain. For it cannot be doubted, that the destruction of substance in the latter organ was the consequence of the disease of its nutritive arteries; and it is scarcely less certain, that the far advanced degeneration of a limited portion of the left ventricle resulted from the diseased and obstructed condition of the artery of the part. The dilated state of the cavity, if only by increasing the extent of surface exposed to the pressure of the blood, probably aggravated in some measure the liability to rupture. But even the dilatation and hypertrophy of the left ventricle may reasonably be regarded as a consequence of the disease of the arteries; for the aorta and other arteries, rendered more or less inelastic by disease, would be a constant impediment to the propulsion of the blood from the left ventricle of the heart. All the other changes in the body may, therefore, be referred to this altered condition of the arteries, the pathology of which is at present so little understood. No arcus senilis was observed in the patient during life. At the beginning of the fourth day after death, when no sign of decomposition had shown itself in the body, the weather being very cold, the eyes were examined, and the corneæ found quite clear, without any appearance of a white or semi-opaque ring or arch.

Dr. C. J. B. Williams inquired of Dr. Baly, whether the arteries of the heart had been examined microscopically, as had those in other parts of the body? They seemed to be the original seat of the disease.

Dr. Baly replied, that they had not been so examined, but might yet be subjected to that mode of investigation.

Dr. Brinton presented a specimen of

ANEURISM OF THE AORTA: WITH A DESCRIPTION OF THE MORBID ANATOMY OF THE RECURRENT NERVE COMPRESSED BY IT.

A rather healthy looking man, aged about 35 years, had suffered from cough and dyspnœa of a somewhat paroxysmal character during four months. One day, while engaged in his ordinary avocation of hawking vegetables in the streets, and exerting his voice to the utmost, he felt something give way in his windpipe, at the same time that his voice was reduced to a hoarse whisper. He entered King's College Hospital. His chief symptoms were a hoarse stridulous murmur, which accompanied the breathing, but was much more marked during inspiration; a partial loss of voice; its musical tones and timbre being greatly diminished, while articulation was perfect; and dyspnœa, with cough. The two latter symptoms were occasionally much increased, so as to constitute a kind of fit, which occurred, on an average, three or four times daily, and ended by a very difficult expectoration of frothy mucus, attended with temporary relief. Little affected by different plans of treatment, he remained some weeks in the hospital, and, about ten days after leaving it at his own request, he suddenly brought up about a quart of venous looking blood, sank, and expired. Through the kindness of the gentleman attending the case, Dr. Brinton made the *post-mortem* examination. The lungs were healthy, but they were rendered pie-bald by a kind of lobular pulmonary apoplexy, evidently due to the blood effused in the air-tubes and vesicles. At the upper part of the thorax, behind the left border of the manubrium was an aneurism. It was about the size of a small hen's egg; it communicated by an aperture the size of a fourpenny piece with the arch of the aorta behind and between the left carotid and subclavian, but rather nearer the latter than the former. It lay against the trachea on its front and left side, from its tenth to its fifteenth rings. To its left was the œsophagus, in front was the left subclavian artery, and the left carotid occupied its right margin. On slitting open the sac of the aneurism, it was found to be occupied below by a soft, recent coagulum, which at its upper and anterior part merged into the ordinary laminated fibrine of an aneurism. The eleventh, twelfth, and thirteenth rings of the trachea were laid bare in the sac of the aneurism, and were apparently somewhat diminished in size by an absorptive process. On the inside of the trachea, corresponding to this situation, the mucous membrane was thickened, protruded, and ulcerated, so as to leave an irregular transverse opening of about half an inch between the twelfth and thirteenth rings, and two other extremely small apertures between the eleventh and twelfth. The left recurrent nerve passed vertically down the left side of the aneurism, in the substance of whose wall it lay for about an inch and a half. In fact, it might almost be said to occupy the cavity of the aneurism for this distance, being only severed from it by an extremely thin membranous lamina, apparently the remains of its sheath. A small segment of this exposed surface of the nerve was carefully torn up, and, shielded from pressure as much as possible, was placed under the field of the microscope side by side with a precisely similar segment of the opposite and healthy nerve. The tubes of the latter offered their ordinary double outline of "white substance of Schwann," and had their usual amount of transpareney. But the constituent tubules of the nerve occupying the aneurismal sac presented a marked contrast in all these respects. Its neurilemma was filled by a yellow, refractile, fatty-looking matter, composed of innumerable granules, of greater or smaller size. Here and there these granules imitated the white substance of Schwann, by taking a peripheric position just within the neurilemma: in some places the largest granules had even a double outline; and in others the approximation was rendered still closer by the granules merging into wavy, peripheric laminæ, having a shape exactly like what may be sometimes produced by great pressure in the human subject, or what is often seen in the nerves of other animals when treated with sundry re-agents. [A drawing representing this contrast of structure was exhibited.] The less exposed parts of the nerve presented similar but less marked appearances. The laryngeal muscles of the same side were paler and firmer than the opposite ones. Their sarcolemma was occupied by darker contents, and their transverse striæ much less distinct.

Dr. Brinton remarked, that, although compression had evidently obtained in this left recurrent nerve, and might produce appearances somewhat similar to those detailed, yet it alone was probably insufficient to account for the contrast. Every care had been taken to compare the two nerves—the healthy and diseased—side by side, under absolutely similar circumstances. The neurilemma of the tubes of each was perfect, their form unaltered, but their colour and structure much affected.

The President asked if the aneurism had been detected during the life of the patient?

Dr. Brinton said, that he had spoken very briefly of the symptoms, as the case was one of several which he believed his friend and colleague, Dr. Todd, would hereafter publish. It was only by his kind permission that he had brought it forward. The diagnosis had been ulceration of the trachea. From the imperfect loss of voice, the reference of the patient's sensations, and the point of greatest intensity of the sound, it had been allotted to the trachea at some distance from the larynx. The man's general symptoms, and very careful stethoscopy, seemed to deny the existence of tubercles in the lungs, and thus of its being phthisis, with great and early ulceration of the larger air-tube. But, while the possibility of an aneurism was fully recognised, the loud roaring of the tracheal sound, and the almost convulsive movements of the tube, completely baffled all attempts to affirm or deny its actual existence.

The new President, Mr. Cæsar Hawkins, delivered the following address, on taking the chair on Tuesday evening last.

Gentlemen,—Before the business of the evening commences, I wish to detain you for a very short time, in order to express to you my acknowledgment for the honour you have done me in electing me your President,—an honour which, perhaps, I appreciate the more, as it is conferred in some sort, after trial; since, besides holding the office of Vice-President from the first establishment of the Society, I have also presided provisionally for several months in the interregnum created by the sudden and premature decease of your last surgical President, whose loss, in the enjoyment of the eminence which his talents and character deserved, was lamented by the public as well as by the whole Profession. It must be my part, gentlemen, to return your confidence, by endeavouring, as far as it lies in my power, to prevent the Society from suffering any diminution of the reputation and prosperity to which it has attained. I congratulate you on this prosperity, though I feel that the responsibility of the task you have confided to me is at the same time increased. I am not afraid, however;—when I first joined the Society, I felt assured that there was ample scope for such a Pathological Association, without detracting from the usefulness of any other medical scientific society in London. Nor have I been disappointed; you have taken care that the number and variety of subjects brought forward, and the novelty and interest possessed by many of them, should foster a love for these evening meetings, and a zeal for scientific pathological investigations, as well as mere morbid anatomy, which have given reputation to your transactions in the eyes of the Profession of this country; in fact, I believe that no one can now prosecute researches on any subject of pathology without having recourse to an inspection of your five valuable reports. I rely, gentlemen, on the continuance of this perseverance and energy, which will thus take away the feeling of responsibility which I might otherwise entertain, especially when I look to the character and talents of those who have preceded me in this chair. But, even the exertions of the members at large would not suffice for the welfare of the Society; much must still rest upon the zeal and energy, for which I look with confidence to my friends on my right hand and on my left.

CHEMICAL SOCIETY.

ON A NEW METHOD OF ESTIMATING THE QUANTITY OF UREA IN URINE.

By Baron LIEBIG.

Dr. Hoffmann, of the Royal College of Chemistry, favoured the Society with some remarks on Professor Liebig's new method of estimating the quantity of urea contained in urine. He stated that various methods had previously been recommended for estimating urea, among others, that of converting the urea into carbonate of ammonia, and ascertaining the quantity of nitrogen. This method, as well as some others, requires too delicate and careful manipulation, while others have been proved to furnish incorrect results. Professor Liebig had been often applied to by his physiological friends at Giessen, to devise some simple method to effect this object, such as a medical man might himself readily apply. Whilst at Giessen, during the Christmas holidays, Professor Liebig showed Dr. Hoffmann the method he had recently discovered to effect this estimation of urea with great facility. It consists in treating the urine under examination with solution of the nitrate of the binoxide of mercury. Dr. Hoffmann then took a solution

containing a known quantity of urea, and to it added a portion of a measured quantity of a standard solution of the nitrate. A copious white precipitate, resembling chloride of silver, was immediately formed, with liberation of free nitric acid. As the presence of this acid prevents the further action of the nitrate, Dr. Hoffmann next added to the solution a sufficient quantity of baryta water to neutralise the acid. This done, the addition of a fresh portion of the nitrate produced a further precipitate; and so on, by repeated additions of the test, and subsequent neutralisation of the free acid by baryta water, Dr. Hoffmann precipitated the whole of the urea present in the solution. Immediately the whole of the urea was precipitated, the addition of a further quantity of the nitrate solution produced a yellow precipitate of protoxide of mercury. The quantity of urea present in a given sample of urine, may thus be readily deduced from the quantity of a solution of the nitrate of mercury required for its precipitation.

Dr. Hoffmann then took a sample of urine, and with it repeated the experiment he had just before performed on a solution of urea.

It was suggested, that the presence of ammonia in urine would interfere with the practical value of the test, and lead to incorrect results. This, however, would not be the case with fresh urine, which would usually form the subject of the medical man's examination.

In reply to the question, whether the presence of diabetic sugar in urine would interfere with the successful action of the proposed test, Dr. Hoffmann stated, that he did not know whether it had been tried or not, but it was his opinion that it would not affect the result obtained.

Dr. Hoffmann stated it to be the intention of Professor Liebig to communicate a full account of his present and future researches on the subject to the Chemical Society. In the meanwhile, he requested Dr. Hoffmann to be the exponent of his views, for the purpose of eliciting the opinions of others with respect to the successful application of the process.

LIVERPOOL MEDICAL SOCIETY.

MALIGNANT DISEASE OF THE UTERUS.

By Mr. DESMOND.

A woman, aged 29, mother of three children, had, at the seventh month of her last pregnancy, a bloody discharge from the vagina, which continued without intermission, but in no great quantity, till her delivery. The labour was natural, and she went on well for four days, when an increase in the natural discharge seemed to take place, and continued in greater or less quantity, but always bloody for two months. She was then admitted into the special ward in the Lying-in Hospital, and came under Mr. Desmond's care. She was then much emaciated; complexion anæmic; countenance expressive of long suffering; abdominal tenderness extreme over its whole surface; great pain in micturition and defecation; constant discharge of bloody fluid from vagina, rather more than equal to ordinary catamenia. Uterus as felt above pubis not much enlarged; pulse rapid, feeble. On examination per vaginam, the submucous tissue round cervix and at upper part of vagina seemed much infiltrated; the os uteri seemed a large gap, and on withdrawing the finger it was smeared with an offensive bloody fluid; on using the speculum, blood flowed so freely that nothing could be seen satisfactorily. Under the treatment adopted, viz., leeches, poulticing, full doses of opium, small doses of calomel, and small pieces of ice introduced into the vagina, the hæmorrhage was checked, and the state of parts became materially altered; all the infiltration and induration disappeared, and the posterior lip of cervix was now found to be gone. She continued much the same, except that she got weaker, till the commencement of October, when œdema of the right leg came on, followed by effusion into the abdominal cavity, and she died on the 29th of October, seven months after the first hæmorrhage, and three months from her admission into the hospital. It should be stated that, after the application of the ice into the vagina, the hæmorrhage returned but very slightly and at intervals, until about two weeks before her death.

Post-mortem Examination Thirty Hours after Death.—Six quarts of clear fluid in abdomen; abdominal viscera generally healthy, but pale, with the exception of uterus and bladder. The bladder was thick, white, and easily torn, and matted to the uterus. *Uterus.*—Fundus and upper half healthy as to size, colour, and consistence; no cervix, but rather as if it had melted away; lower part of uterus of a slaty blackness throughout its substance, shreddy, and pulpy below, getting gradually firmer towards the fundus, where it seemed of natural consistence. The blackness, which extended throughout the whole structure of the uterus at its lower part, ended in an abrupt and well-defined line about midway up to fundus. An incipient blackening was also to be seen in the mucous membrane at the upper part of uterine cavity. Ovaries healthy, pale; one cyst in each lined with black matter. The glands along the course of right iliac vein were enlarged, hard, and white.

Mr. Desmond considered it a case of corroding ulcer, with melanotic deposit.

UTERUS AND APPENDAGES DURING A MENSTRUAL PERIOD.

By Mr. GRIMSDALE.

This was from a young unmarried woman of good character, who had menstruated regularly till her death, which occurred from post pharyngeal abscess, on the second or third day of a menstrual period. The uterus was of the normal size, its posterior surface dark red from hypostatic congestion. Fallopian tubes much congested, especially towards their fimbriated extremities. The os uteri slightly open, and free from any discharge whatever; round the margin of the os was a bright red line, which, on close examination, seemed like a fringe of minute granulations. The cavity of cervix natural in colour, was empty, just moistened apparently with its natural mucus. The uterine cavity contained a bloody fluid spread over and adhering to its mucous lining; this at the upper part had the appearance of pure arterial blood, or nearly so; towards the commencement of the cervical cavity it seemed mixed with a mucous fluid, and to be more abundant, as if it would readily run down; but none appeared in the cervical cavity. The cut substance of the uterus was healthy in appearance. The ovaries looked healthy; the left, the larger, had a patch of congested-looking redness on its posterior surface, and in the centre of this patch was a darker depressed spot. A bristle was very carefully applied to this, and without the slightest force was found to pass through the peritoneal covering; it passed into what appeared to be a very singularly circular cavity, lined with a yellowish matter, and containing a substance looking like coagulated blood and mucus. The shape of the enclosed matter might be compared to that of a double convex lens, with a very irregular outline. The hole through the peritoneum penetrated also through the yellowish matter. The right ovary, not so large as the left, had on its surface several cicatrices; one of these, when cut into, showed it to have been situated over an empty irregular cavity, lined with yellowish matter. This matter lined the whole cavity, except at the spot corresponding to the cicatrix; here there was nothing but the thin peritoneal coating over it. The Fallopian tubes were found to contain for about their distal half rather a larger quantity of bloody-looking mucus; that portion of each tube next the uterus was empty.

MEDICAL NEWS.

Royal College of Surgeons.—The Hunterian Oration will be delivered by Mr. Luke, the Vice-President, on Saturday, the 14th of February.—(*Vide* advertisement.)

Jacksonian Prize.—The Council of the Royal College of Surgeons have just announced the subject for this prize of twenty guineas to be "The Pathology and Treatment of Stricture of the Urethra." The Dissertations must be sent in before Christmas-day, 1852.

The Fellowship.—The following are the subjects of the examination of the candidates for the Fellowship of the College in classics, mathematics, and French, during the years 1852 and 1853, viz.:—*Classics.*—Either of the following Greek Authors, and either of the following Latin Authors, at the option of the candidate, viz., Herodotus, Book III, Homer, Iliad, Book VI., Virgil, Æneid, Book VIII., Livy, Book V. *Mathematics.*—Arithmetic; algebra, as far as to include the doctrine of proportions and simple equations, with one or two unknown quantities; Euclid, Books I., II., III.; statics, hydrostatics, acoustics, and optics, it being understood that the questions on these subjects shall not require in their answers the use of a higher branch of mathematics than simple equations. *French.*—The translation into English of a passage in one of the French classical Writers.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, January 15, 1852:—

Howard, Horace Fulcher, New Barkenham, Norfolk.
Partridge, Samuel, Darlaston, Staffordshire.

OBITUARY.—It is with great regret we announce the death of Mr. Cumming, of Buxton, Derbyshire, by drowning. On Friday last, this unfortunate gentleman being on a visit to Matlock, procured a boat, and commenced rowing about on the Derwent for the amusement of his child. The river was greatly swollen, and, the current being consequently very strong, only a short time elapsed before their boat was drawn over the Weir at Masson-mill, and grounded at the foot of the fall. A number of spectators on the right bank of the stream perceiving the accident and the perilous position of the unfortunate persons, ropes, boats, etc., were speedily at hand for the purpose of rescue. But Mr. Cumming was a good swimmer, and, being impatient of the necessary delay in assistance reaching him, he unfortunately left the boat, and endeavoured to swim to the shore with his son on his left arm. The boat, relieved of their weight, drifted away, and the river, having the force of a mountain torrent, carried father and son with it also. The unhappy father made the most desperate efforts imaginable to save his boy. He could probably have escaped himself had he sacrificed his child, and, while fresh and vigorous, made alone for the shore; but time after time the lad was washed from his arms, and again and again did he plunge after him, until both were thoroughly exhausted. Then, after a series of most pitiful and tearful struggles, each subsequent one becoming more and more feeble, they at length sank, clinging to each other in the last agonies of death. Their bodies were not recovered until some time afterwards. Mr. Cumming was a professional gentleman of considerable practice. He was a member of the College and Hall of 1828, surgeon to the Buxton Bath Charity, and to one of the Union districts. He was universally respected, and has left a wife and seven children.—At Acapulco, Mexico, John Stuart M'Goun, M.D.

NAVAL APPOINTMENTS.—Surgeon William Loney, M.D., (1845), to the Hydra. Assistant-Surgeons Thomas Hunter (1845), from the Waterloo, 120, flag-ship at Sheerness, to the Hydra. Francis H. Blaxall (1848), from the Victory, flag-ship at Portsmouth, for service in the Naval Hospital, to the Waterloo, vice Hunter.

BEQUEST.—The late Rev. Dr. Hudleston has bequeathed 2000*l.* to the Whitehaven Infirmary.

PATHOLOGICAL SOCIETY.—The following gentlemen were elected members of this Society, at the last meeting, on the 20th instant:—Frederick Barlow, Esq., resident medical officer Westminster Hospital; J. Abernethy Kingdon, Esq.; Dr. Alexander Halley; and Richard Hansard, Esq., surgeon to the Oxford Hospital. Dr. Bentley was elected an honorary member.

MICROSCOPICAL SOCIETY.—At the last meeting, a paper was read by Mr. T. Huxley, in reference to the *Lacinularia Socialis*, family, *Rotifera*, in which the fact of its having two kinds of reproductive bodies was pointed out. One of these were ordinary ova,—the other bodies, twice the size, partook of the character of gemma.

KING'S COLLEGE HOSPITAL.—Mr. Plowden, one of the Directors of the East India Company, has notified to the Managing Committee of King's College Hospital, his intention of putting at their disposal the appointment of an assistant-surgeon in the Company's service.

DR. GRANT.—A Committee of the friends and pupils of this gentleman has been formed, for the purpose of raising a fund by way of testimonial of the "high esteem in which his long continued, unwearied, and original scientific labours are held by men of science in general and his pupils in particular."

WAKEFIELD MEDICAL SOCIETY.—"To the Right Honourable Sir George Grey, Bart., Secretary of State for the Home Department. The memorial of the Wakefield Medical Society, sheweth—That your memorialists are of opinion that in any new Charter to be granted to the Royal College of Surgeons of England, it should be provided—1st. That, in the election of the Council, all Fellows should have the privilege of voting by balloting papers, and not be compelled to attend in person. 2ndly. That all who may be members at the date of granting the proposed New Charter, shall be equally eligible for the Fellowship with those members who received their diplomas prior to 1843.—SAML. HOLDSWORTH, M.D., M.R.C.S.E., Chairman of the meeting.—Dispensary, Jan. 14, 1852."

BIRMINGHAM PHILOSOPHICAL INSTITUTION.—The following resolutions on the subject of homœopathy were unanimously passed at the annual meeting of the above Institution:—"That the following classes of practitioners are unqualified to become or continue members of this Society:—1. Those who practise homœopathy exclusively. 2. Those who practise homœopathy in conjunction with other systems of medicine. 3. Those who, under various pretences, meet in consultation, or hold professional intercourse with those who practise homœopathy. That a copy of the above be sent to the *Lancet*, *Medical Times and Gazette*, *Provincial Medical and Surgical Journal*, and *Dublin Quarterly Review*, requesting its insertion."

THE HOMŒOPATHS.—The Gloucestershire Medical and Surgical Association have carried a series of resolutions condemnatory of the practice of homœopathy.

THE VOTE BY PROXY.—The Gloucestershire Medical and Surgical Association have resolved, "That the Association notice in terms of approbation the supplemental Charter issued by the College of Surgeons; but that the absence of a provision for voting by proxy in the case of provincial members is considered a serious defect."

QUEEN'S COLLEGE, BIRMINGHAM.—We have the gratification to announce, that the Royal assent has been given to the supplemental Charter of the Queen's College in this town, and the Great Seal attached to it.

THE sittings of the International Sanitary Conference at Paris, were closed on Monday, the 19th instant, by the Ministers of Foreign Affairs and Commerce. The Conference has left with the Ministers a convention and a body of sanitary regulations, establishing, as clearly as possible, a uniformity in the system of the quarantines, both in the sanitary laws and administration of the Mediterranean. Meanwhile, a decree in the *Moniteur* directs that the Lazaretto at Marseilles shall be sold, and that docks be constructed on its site.

M. PASQUIER.—The President of the French Republic, taking into consideration the eminent services of the late M. Pasquier, formerly head-surgeon to the Invalides, and afterwards surgeon to the Orleans' family, as well as the destitute condition in which he has left his family, has generously accorded a pension of 2,000 fr. (80*l.*) to Madame Pasquier, and ordered that her five children be educated at St. Denis, or in a college at the expense of the State.

THE MUSEUM OF MANKIND.—Mr. Catlin, the energetic collector in the field of Red Indian relics, lately developed his plans towards the establishment of a "Museum of Mankind," previously noticed in this Journal. The very name of such a collection clothes it with a melancholy interest,—in three words it opens up to our minds the long, dismal history of extermination, of bloody wars, and of national wrong-doing by which myriads of our fellow-men have been swept from the earth, and of many a tribe of which not a rack is left behind. For this, as an individual, however, Mr. Catlin is in no way responsible; and, indeed, he deserves all praise for his zealous endeavours to preserve at least some remains of those races which are thus fast dwindling away. We hope that he may be able to carry out his plan to an extent worthy of his ethnographical antecedents, and that he will be munificently assisted by this country.

ZOOLOGY.—M. Geoffrey Saint Hilaire has just brought out the first part of his methodical catalogue of the mammiferous animals and the birds in the Paris Museum of Natural History.

BRITISH ARCHÆOLOGY.—The members of the Association paid a visit on Wednesday to Barbers' Hall, when Mr. Pettigrew read an interesting paper on the history of the barber surgeons, with a description of the Hall and its contents.

SOCIETE DE BIOLOGIE.—Dr. Redfern, author of "Anormal Nutrition in Articular Cartilages, &c.," and lecturer on anatomy and physiology in the University of Aberdeen, has been elected a corresponding member of the above Society. The diploma conferring this honour is signed by the following distinguished savans: Rayer, Bernard, Robin, Brown, Séquard, and Lebert.

PRUSSIA.—In the Order of Merit instituted by the King for men distinguished in art and in science, there are now five Englishmen: Mr. R. Brown, Sir David Brewster, Sir J. Herschel, Mr. Farraday, and Professor Owen.

PROVINCIAL MUSEUMS.—Bury, following the example of Ipswich, is to have a museum, towards which the Marquis of Bristol has made a donation of 100*l.*

METEOROLOGY.—The Greenwich Observatory is to be placed in connexion with the electric wires of the South-Eastern Railway. Important advantages will be secured by such an arrangement.

THE PUBLIC RECORDS.—By recent regulations of the Master of the Rolls, literary men are to be admitted to search the public records without fee, under certain necessary conditions.

THE VICTORIA PYRAMID NECROPOLIS.—Mr. Willson, the architect of a pyramidal monument in South Africa, marking the roadstead of Algoa Bay, proposes to enclose a hundred acres as a Garden Cemetery, and in its midst to erect a great Pyramid, standing on a base of twenty acres, "and towering aloft with Egyptian massiveness." We are not quite sure whether Egyptian massive-

ness and Egyptian pyramids are the beau ideal of sepulchral architecture to English eyes. We take the low sod to be the more congenial mark of the resting-place of the departed. Massive heaps of masonry bearing down upon the dead are anything but emblematic of man's destiny.

SUBMARINE RAILWAY.—M. Horeau, an architect in Paris, proposes, for fourteen millions sterling, to lay a railway in the bed of the sea, between England and France,—the road to be enclosed in a tube fastened down in its bed by huge iron pins, at intervals of a mile,—these pins to carry lights on their heads at night as beacons to warn ships against anchoring over the railway. What next? and on what terms will the Railway Insurance Company take lives. Mr. Neison should begin his calculations at once.

MEDICAL FEES BY RAILWAY.—MARYLEBONE COUNTY COURT.—BROWN *v.* BANKS.—This was an action of great importance to the Profession, and to the public who require their services at a distance; and it being the first brought to determine what mileage should be allowed since the introduction of railways, excited much interest to the members of the Medical Profession in attendance. The plaintiff is a consulting surgeon, of 27, Oxford-square, and the defendant is a gentleman residing at Leighton Hall, in Nottinghamshire. The sum sought to be recovered was 39*l.* 7s. 6d. for medical attendance upon Mrs. Haffenden, the defendant's sister. Mr. Brown said, that he was the medical attendant to defendant's family. On May the 23rd, Mr. Banks called upon him, and requested that he would go instanter to see his sister, who was dangerously ill, at Leighton Hall, Notts, a distance of 150 miles. He travelled by rail, and returned to town on the 24th. Considers the sum charged is small. The usual charge is 10s. 6d. per mile, or 15 guineas per day,—and 7s. 6d. per mile for 300 miles is not a large sum. Met two medical men at Leighton Hall, and consulted with them. Mrs. Haffenden was in danger, and had been so since her marriage. The charge for post-horsing by M.D.'s was 1*l.* 1s. per mile, but by rail the charge was 10s. 6d. per mile. By Mr. Parry.—Knew the family for three years. Travelled to Leighton Hall by first class. Is in practice as a consulting surgeon. Keeps books; but has not practised as an apothecary for five years. Was obliged to have a deputy to visit his patients whilst he was absent. The deputy was not employed specially, but by the year. It was inconvenient to say how he paid his deputy. Mr. Parry: "I take it to be an extremely moderate sum, which will satisfy me." Plaintiff's examination resumed. Mrs. Haffenden had previously to my going down written to see me. I said I would go to her for 10 guineas, on condition of receiving two days' notice. I understood Mrs. Haffenden would pay me out of a small annuity she had. The husband of the lady has treated me in very discourteous terms. He has repudiated my services. Am not suing the husband. Had been to Dover, for which 35*l.* were charged. There is no difference in the charges of consulting surgeons or physicians. From the nature of the lady's disorder, and out of consideration to ladies, offered to take 10 guineas of Mrs. Haffenden. Dr. Tyler Smith said he had been a physician for the last eleven years. Knew more of the practice of M.D.'s than of consulting surgeons, but always considered them to be the same. Since the establishment of railways, the fees vary very much. Some will not go for less than two guineas and a half for three miles, and others for a guinea for the first three miles. He considered the sum now charged a fair sum for 150 miles. It was below the average fee. Mr. Laing, of No. 1, Grosvenor-place, deposed to the fairness of the demand for that distance. By Mr. Parry.—Has been a consulting surgeon for twenty-five years. Is related to the defendant. He is nephew to his (witness's) wife. Considers distance an important element in the matter. In a long journey—say over 200 miles—some difference is usually made. Mr. Parry said, a gentleman like Mr. Banks did not repudiate a fair claim, and for the credit of the family he did not throw the liability upon his sister's husband. The demand was preposterous. It was at the rate of 4,500*l.* per year, leaving out Sundays, though he believed medical men did not consider the Sabbath a day of rest. The plaintiff was not in the distinguished position of a Dr. Tyler Smith, who would not for a moment have left his patients in the hands of an assistant with less than 100*l.* a year, as Mr. Brown did. The plaintiff had not proved the loss of a patient. His books show, some days he takes seven and sometimes three guineas per day. The calling in of medical men, as in this instance, to state their fees, was like calling in counsel to cut down his fees. (Laughter.) The Judge said, it was a great difficulty to determine the equitableness of medical men's fees, as the railways had so disarranged them. The defendant had, it appeared, paid twenty guineas into this court, as being what he considered ample remuneration. He had not, however, called in the same valuable opinions as the plaintiff had to support his view. The plaintiff's witnesses considered the charges below the market-price, and their evidence fully satisfied him that the claim was fair. In his own opinion, he did not consider it at all unreasonable, and should therefore give a verdict for the plaintiff, with full costs.

[Advertisement].—TO THE MEDICAL PROFESSION.—The members of the Medical Profession are usually dependent upon their own personal exertions for their subsistence. If health fail, they fall into distress; if they die, their families are unprovided for.

The uncertainty of their incomes often prevents them from making provision for infirmity, old age, or death, by the usual methods of assurance. To meet this difficulty, The Law Property Assurance Society has made the following arrangements for the benefit of the Profession:—

1. It grants special policies of assurance, by which the assured, instead of being obliged to pay a fixed sum every year or forfeit their policies, may pay any sum they please, at any time, according to their means, and for which a proportionate sum will be assured to them by their policy. By this means uncertainty of income is provided for, and no forfeiture for non-payment ever takes place.

2. If the assurer in this office should find that the objects of his insurance after death are no longer required, he may convert his policy into an annuity for his own life.

3. On payment of a small annual sum during their own lives, husbands may secure annuities for their wives or daughters after their own decease.

4. On payment of a small sum annually, professional men may secure for themselves an annuity, to commence on the decline of life, or earlier, should they be at any time disabled, by sickness or infirmity, from pursuing their occupations.

Detailed prospectuses, forms of proposal, and every information, will be immediately furnished on application to WILLIAM NEISON, Actuary and Secretary, 30, Essex-street, Strand, London.

DEATHS *in the Metropolis for the week ending Saturday, January* 17, 1852.

CAUSES OF DEATH.	JAN. 17. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	477	360	253	1096	11393
SPECIFIED CAUSES	475	353	253	1087	11300
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	147	37	23	207	2286
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	1	25	19	45	525
3. Tubercular Diseases	67	109	11	187	1830
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	46	36	35	117	1314
5. Diseases of the Heart and Blood-vessels	7	33	20	60	392
6. Diseases of the Lungs and of the other Organs of Respiration ...	97	55	66	218	2473
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	28	26	9	63	631
8. Diseases of the Kidneys, &c. ...	...	8	2	10	112
9. Childbirth, Diseases of the Uterus	...	11	...	11	109
10. Rheumatism, Diseases of the Bones, Joints, &c.	4	2	4	10	66
11. Diseases of the Skin, Cellular Tissue, &c.	1	1	...	2	14
12. Malformations	2	...	...	2	23
13. Premature Birth and Debility ...	41	1	...	42	246
14. Atrophy	19	1	1	21	157
15. Age	...	...	59	60	771
16. Sudden	1	...	1	2	102
17. Violence, Privation, Cold, and Intemperance	14	13	3	30	249
CAUSES NOT SPECIFIED	2	2	...	9	93

TO CORRESPONDENTS.

A press of matter obliges us to defer several valuable communications, and also answers to various Correspondents.

COMMUNICATIONS have been received from—

M.D.; M.R.C.S. Eng.; Dr. LIGHTFOOT, of Great Ormond-street; Dr. WANSBROUGH, of Camden-grove, Kensington; Dr. CARR, of Manchester; Mr. HINTON, of the Blaina Iron Works; Mr. WARWICK, of Southend; Dr. BARCLAY, of St. George's Hospital, and Curzon-street; M.D.; DEVIZES; Dr. BARKER, of Bedford; PHILOS; Dr. STATHAM, of Mortimer-street, Cavendish-square; Dr. BURKE RYAN, of Bayswater; Mr. MILTON, of Jewin-street; Mr. THOMSON, of King's College; WIDE AWAKE; SECRETARIES OF THE METROPOLITAN SANITARY ASSOCIATION; A COUNTRY SUBSCRIBER; Mr. SANDS COX, of Birmingham; Mr. ADAMS, of the London Hospital, and St. Helen's-place; Dr. ROODS, of Bloomsbury-street; Professor SYME, of Edinburgh; Mr. MILNER, of Wakefield; Dr. WRIGHT, of Paris; Mr. BOWMAN, of King's College, and Clifford-street; A LONDON SURGEON; Dr. WOOD, of Bethlem; Mr. WALSH, of Worcester; SECRETARIES OF THE BIRMINGHAM PHILOSOPHICAL INSTITUTION; Mr. RUSSELL REYNOLDS, of Leeds.

MEDICAL BENEVOLENT COLLEGE.

ESTABLISHED JUNE, 1851.

President.

THE EARL MANVERS.

Trustees.

DR. J. A. WILSON.
DR. R. LEE, F.R.S.

WM. FERGUSSON, Esq., F.R.S.
JOHN BACOT, Esq.

BENJAMIN PHILLIPS, Esq., F.R.S.

Treasurer.

JOHN PROPERT, Esq., New Cavendish-street.

The Council have much satisfaction in being able to publish thus early, the SECOND LIST of CONTRIBUTORS to the FUNDS of the COLLEGE, and they are induced to hope, that, as the principles and objects of the Institution become better known, it will receive the unanimous and cordial support of the entire Profession.

Subjoined is a List of Gentlemen who have kindly consented to act as Honorary Local Secretaries for their respective neighbourhoods.

Honorary Local Secretaries.

Allison, Wm. Esq., East Retford, Notts
Barker, John, Esq., M.D., Richmond
Barker, T. Herbert, Esq., M.D., Bedford
Barnett, J. H., Esq., Farringdon
Beaumont, John, Esq., Chesthunt
Bleeck, C. Esq., Warminster
Bowling, John, Esq., Hammersmith
Bumpstead, T. B., Esq., Cambridge
Bunce, J. S., Esq., M.D., Woodford
Burrows, J. Cordy, Esq., Brighton
Bury, George, Esq., Whetstone
Carr, Wm., Esq., Lea
Clifton, Nathaniel Henry, Esq., Islington
Coates, Wm. Martin, Esq., Salisbury
Collambell, Chas., Esq., Lambeth
Copeman, E., Esq., Treasurer, Norfolk
Colthurst, John, Esq., Clifton
Cooper, George, Esq., Brentford
Cotton, Chas., Esq., M.D., Lynn, Norfolk
Crisb, Henry, Esq., Bishop's Stortford
Cripps, Edward, Esq., Cirencester
Curtis, Geo., Esq., Dorking
Curtis, H. C., Esq., Great Marlow
Cutfield, A. B., Esq., Deal
Davis, Wm. George, Esq., Heytesbury
Day, Horatio, Esq., Isleworth
Dickinson, J., Esq., M.D., Liverpool
Drage, Charles, Esq., Hatfield
Eastes, Silvester, Esq., Folkestone
Elliot, Robert, Esq., M.D., Carlisle
Elliot, Wm., M.D., Stratford
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Gorham, R. V., Esq., Aldeburgh, Suffolk
Gorham, John, Esq., Tunbridge
Gruggen, H. M., Esq., M.D., Chichester
Hammond, T. M. Esq., Brixton
Harper, Phillip, Esq., Bilston
Harris, William, Esq., Worthing
Harrison, G. F. B., Esq., Devonport
Hawtborne, Arthur N., Esq., Eccleshall
Hester, James Torry, Esq., Oxford
Hillier, H. B. C., Esq., M.D., Tenby
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Inman, Richard, Esq., Preston
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Kenoion, Geo., Esq., M.D., Harrogate
King, Ormer, Esq., Greenwich
Lowford, E., Esq., Leighton Buzzard
Leithead, Thos., Esq., Warkworth
Lomax, Henry, Esq., Stafford
Martin, Adam, Esq., M.D., Rochester
Martin, Peter, Esq., Reigate
May, George P., Esq., M.D., Maldon
Morris, Edwin, Esq., M.D., Spalding
Morris, Thos., Esq., Peckham
Paley, Wm., M.D., Peterborough
Phillips, Jas. Esq., Bethnal-green
Pinching, Charles J., Esq., Gravesend
Power, J. J., Esq., M.D., Maidstone
Poyser, Thos., Esq., Wirksworth
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Pyle, Charles, Esq., Amesbury
Ray, Geo., Esq., Milton, Sittingbourne, Kent
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Smith, Wm., Esq., M.D., Weymouth
Smyth, Spencer Thomas, Yarmouth
Stedman, James, Esq., Guildford
Sterry, Henry, Esq., Bermondsey
Stevens, J. N., Esq., Plymouth.
Stilwell, George, Esq., Epsom
Stowe, William, Esq., Buckingham
Sweeting, William, Esq., Dorchester
Turner, Rich., Esq., Tunbridge Wells
Vines, Charles, Esq., Reading
Walter, John, Esq., Dover
Ward, Thomas, Esq., Watford
Whitsed, J., M.D., Wisbeach
Worthington, W. Collins, Esq., Suffolk
Young, D. S., Esq., Boulogne
Young, F. A., Esq., Hawkhurst

Amount already advertised £3,700

	£	s.	d.
Arthur, J. Esq., High street, Shadwell	5	0	0
Ditto ditto annual	1	1	0
A Friend, by Miss C.	5	0	0
Allison, Wm. Esq., East Retford	2	2	0
Boston, Lord, United Service Club	10	10	0
Barr, Mrs., Trafalgar square, Brixton	5	5	0
Balderson, A. T. Esq., Poland st ...ann	1	1	0
Bayntun, W. R., Esq., Bath	1	1	0
Brande, Everand, Esq., Turnham green	10	0	0
Bigg, Wm. Esq., Langham place	5	5	0
Brendon, Peter, Esq., Highgate	5	5	0
Ditto ditto ...annual	1	1	0
Burnside, Mrs., Lyme Regis	1	0	0
Beard, Mr., 111, Aldersgate street ann	1	1	0
Buck, Thos. Esq., Princes place, Kennington common	1	1	0
Bunbury, Edmund, Esq., Lincoln's inn fields ..... annual	1	1	0
B. L., per J. R.	1	0	0
Bancroft, Miss, by Dr. Beattie	1	0	0
Bromley, Hy. Esq., Rippengale Bourne, Lincoln	1	1	0
Barker, J., M.D., Richmond	1	1	0
Ditto ditto annual	1	1	0
Churchill, John, Esq., Medical Publisher, Princes street, Soho	100	0	0
Clarke, J. F. Esq., Gerrard street, Soho square ..... annual	1	1	0
Crew, F. Esq., Lamb's Conduit street	5	0	0
Colbeck, Thos. Esq., Kensington	3	3	0
Collected on card by a Lady's Maid, Weymouth street	0	12	6
Collected on card by Miss F. Davis	1	3	0
Coward, T. C., Stepney..... annual	1	1	0
Cooke, Martin, Esq., Trinity square	1	1	0
Copeman, Miss, by Dr. Beattie	2	0	0
Child, Mrs., Royland, ditto	1	0	0
Collected by J. Griffith, Esq., Harley st.	1	5	0
Collected by Friends, Petersfield	3	0	0
Cross, R. S. Esq., ditto	1	1	0
Collected on card by Mrs. Watlington, Chaldecot, Herts	6	2	6
Collected on card, by Miss Willock, Brighton	10	10	0
Cowdell, Dr., Dorchester	5	5	0
Ditto ditto annual	1	1	0
Cutfield, A. B. Esq., Deal	1	1	0
Cooper, George, Esq., Brentford	10	10	0
Dawes, Rob. Esq., Grenada	2	0	0
Dalton, Wm. Esq., Crescent terrace, Cheltenham ..... annual	1	1	0
Davis, J. H., M.D., Russell place, Fitzroy square ..... annual	1	1	0
Dyne, Rev. J. B., Highgate	1	1	0
Ellis, the Lady, Southall park	2	0	0
Ewbank, Miss, Portugalt, Grosvenor sq	5	5	0
Ellison, Samuel K. Esq., High street, Poplar	1	1	0
Evershed, Peter Esq., Billinghurst	1	1	0
Fane, Rev. E., Fulbeck Rectory	1	0	0
Fitzgerald, Mrs., Brompton..... annual	0	10	0
Frere, Jn. Esq., Stamford brook	5	0	0
Gelston, Mrs., Gloucester place, Portman square	20	0	0
Gale, Baker, Warde, and Oldfield, Messrs., Bouverie street ..... annual	2	2	0

	£	s.	d.
George, Ed. M.D., Sandgate..... annual	1	1	0
Hammond, G. Esq., Portland place ...	10	10	0
Hochee, Jno. Esq., and Family, East Grinstead	2	0	0
Harrison, G. F. B. Esq., Devonport, ann	1	1	0
Inman, Richd. Esq., Preston.....	2	0	0
Irving, T. Esq., Eaton place	2	2	0
Jay, Mrs., Norfolk street, Park lane...	1	1	0
Jacomb, Thos. Esq., Lansdowne terrace	1	1	0
Jones, Thos. C. Esq., Pembroke dock...	2	0	0
Knyvett, Miss.....	1	0	0
Knyvett, Miss H.....	1	0	0
Kendrick, Mrs., and Friends	3	5	6
Kenderdine, Thos. B. Esq., Macclesfield annual	1	1	0
King, Osmer, Esq., Greenwich...annual	1	1	0
Lawrence, S. G. Esq., Brighton.....	5	0	0
Laurie, Jno. Esq., Hyde park place.....	5	5	0
Longhorne, Mrs., Kentish Town	1	1	0
Leese, G. M. Esq., Gloucester place, Portman square	1	1	0
The Macclesfield Medico-Ethical Society	5	5	0
Miles, Jno. Esq., Charter house square	5	5	0
Morris, John Carnac, Esq., Mansfield street	5	5	0
Maw, Solomon, Esq., Aldersgate street	10	10	0
Martens, Miss, Stanhope street, Regents park	0	10	6
May, G. P. Esq., Maldon.....	2	2	0
Myers, Hy. Esq., Milton street, Dorset square..... annual	1	1	0
Mackey, Eric, M.D., Birmingham	1	0	0
Munday, — Esq., John street.....	2	2	0
Maclure, Bowman, Esq., Harley street	1	0	0
Miskin, Wm. Esq., Chamberlain's wharf	1	1	0
Morgan, C. Esq., Bedford place, Russell square	1	1	0
Mayo, Charles, Esq., Winchester	1	1	0
Mott, Charles, Esq., Walton-on-Thames annual	1	1	0
Newnham, — Esq.....	1	1	0
Nicholay, Rev. C. J., Sloane terrace, Chelsea	1	1	0
Newton, Edward, Esq., Howland street	10	10	0
Oldfield, David, Esq., Bouverie street, Fleet street .....annual	1	1	0
Owen, H. K. Esq., Binfield place, Clapham road	3	3	0
Owen, Miss Harvey, Binfield-pl , Clapham road	2	2	0
Overend, Miss E., Brighton annual	1	1	0
Palmer, J. C. Esq., Harley street.....	0	10	6
Pope, J. H. Esq., Manchester-square ...	5	5	0
Porter, Dr., Bishopsgate street Without	5	5	0
Pearson, Mrs.—, Sunning	2	0	0
Pritchett, Charles, Esq., Limehouse ...	1	1	0
Page, W. B. Esq., Carlisle	5	0	0
Parker, Dr., Finsbury square.....	1	1	0
Paynter, John, Esq., Blackheath	10	10	0
Pretty, Messrs. W. and J., 31, Bayham terrace	2	2	0
Paley, Wm., M.D., Peterborough ann.	1	1	0
Rowland, R. Esq., Westonzoyland ann.	1	1	0
Reeve, Gen., Leadenham House, Lincoln	5	0	0
Rowlands, Mrs., Cardigan	5	0	0
Salmon, Wm., Esq., Park square	2	2	0
Silver, Dr. W., Addison rd., Kensington	105	0	0
Squibb, Geo. James, Esq., Orchard st., Portman square (second donation) ...	5	5	0
Ditto Ditto annual	1	1	0
Smyth, Dr. G., Sackville street.....	3	3	0
Shaw, H. E. Esq., Sutton Colefield	0	10	6
Stone, Wm. Esq., Leighton Buzzard ...	1	1	0
Sola, A. Esq., Putney..... annual	1	1	0
Savage, J. W. Esq., West Bromwich ...	1	1	0
Stone, T. B. Esq., Little Waltham	1	1	0
Stone, Wm. Esq., Leighton Buzzard ...	1	1	0
Smith, Messrs. C. and C. S., Fulbeck, Lincoln	5	0	0
Ditto .....annual	1	1	0
Sladden, J. Esq., Ash, Sandwich ann.	1	1	0
Snow, Dr., Frith street, Soho annual	1	1	0
Thomas, H. Esq., by (paid into Bankers)	13	0	6
Taplin, Thomas, Esq., St. James's sq...	5	0	0
Tatum, Thomas, Esq., George-street, Hanover square	2	2	0
Tooke, Wm. Esq., Russell square.....	10	10	0
Tribe, Miss	1	1	0
Wilkinson, J. Esq.. Fitzroy park, Highgate.....	5	5	0
Weston, Miss, Bury St. Edmunds	2	0	0
Wakley, J. G. Esq., Adelphi chambers..... annual	2	2	0
Walsh, C. R. Esq., Halfmoon street ...	1	1	0
Wade, Robt., Esq., Dean street... annual	1	1	0
Wickins, Mrs., the Grove, Kentish town	5	0	0
Winthrop, W. Esq.	10	0	0
Wallis, Wm. Esq., R.N.....	1	1	0
Webb, J. M. Esq., Hibernia chambers	2	2	0
Wood, Dr., Winchester.....	1	1	0
Wickham, Wm., Esq. ditto	1	1	0
West, Francis, Esq., Pinner, Herts.....	1	1	0
West, Mrs. ditto	1	1	0
Westwood, John, Esq., Dartford	2	2	0
Wallace, Richard, Esq., Hackney road.	2	0	0
Whitsed, John, M.D., Wisbeach annual	1	1	0
Young, D. S. Esq., Boulogne ... annual	1	1	0

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Ed. Jeffrey, Esq..... annual	1	1	0
Samuel Smith, Esq.....annual	1	1	0
Rev. Matthias Beaumont	0	10	0
W. F. Bond, Esq.	0	10	0
Miss Miller	1	0	0
V. Morse, Esq.	0	10	0
A Friend	0	5	0
Ditto	0	5	0

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Ditto ditto..... annual	1	1	0
J. Y. Smedley, Esq., Cambridge	1	1	0
John Hewitt, jun., Esq., Spalding	1	1	0
John Morris, Esq., London.....	1	1	0
Josh. Morris, Esq., ditto.....	1	1	0
Miss Denham, Spalding .....annual	0	10	0
Henry Bugg, Esq. ditto	0	10	0
John Hewitt, Esq., ditto.....	0	10	0
Henry Morris, Esq., Gosberton, Lincoln	1	1	0
Samuel Morris, Esq., ditto.....	1	1	0
Collected in small sums	0	11	0

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J. L. Puxley, Esq.....	1	1	0
Mrs. R. Thomas.....	0	10	0
A Friend, by Dr. Hillier	0	5	0
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Dr. Bryant	2	2	0
J. White, Esq.....	1	1	0
Dr. Hood	2	2	0
E. H. Linnecar, Esq.....	2	2	0
W. Emmerson, Esq.	2	2	0
Two Friends.....	2	0	0
Mrs. Harris	1	1	0
J. J. Swindell, Esq.	1	1	0
Miss Maitland.....	1	1	0
Charles Godson, Esq. .....annual	1	1	0
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A Medical Man's Widow	1	1	0
Ditto Daughter	1	1	0
A Friend	1	1	0
J. Claypon, Esq.....	1	1	0
— Chappell, Esq., Friere park	1	1	0
Mrs. Thompson, Colney Hatch	2	0	0
B. Smith, Esq., Barnet	0	10	0
W. J. Lysley, Esq., Mimwood	3	3	0

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Peter Martin, Esq.....	5	5	0
Wm. Hackblock, Esq.	5	5	0
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Henry Lainson, Esq.....	2	2	0
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George Baker, Esq.	1	1	0

By John Steele, Esq.

George Wythes, Esq., Reigate	10	10	0
Thomas Richter, Esq., Cadogan Cottage, Sloane street	5	0	0
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	£	s.	d.
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T. Colcott, Esq., Romsey	1	1	0
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W. R. Loveless, Esq., Stockbridge	1	1	0
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Mrs. Dowling, ditto	1	1	0
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Major J. Jackson, ditto	1	1	0
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The Misses Felgate and Friends, by Miss Prettyman, Bawdry, Woodbridge.....	2	2	3
By Miss Prettyman, from a Union in Suffolk, in acknowledgement of the Gratuitous Services rendered to the Poor by the Medical Profession.....	1	0	0

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Joseph Dickinson, M.D., Ditto	5	5	0
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Ellis Jones, Esq.....	5	5	0
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James Vose, M.D..... annual	1	1	0
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Thomas Lewis, Esq. ..... annual	1	1	0
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J. A. Pearson, Esq..... annual	1	1	0
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Mrs. J. Munford	1	1	0
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F. H. Fleet, Esq.	0	10	0
The Venerable the Archdeacon Kingstone	1	1	0
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ORIGINAL LECTURES.

LECTURES
ON
DIGESTION, RESPIRATION, AND SECRETION,
AT
The Royal Institution,
To the Members, and to the Pupils of St. George's Hospital.

By H. BENCE JONES, M.D., F.R.S.,
Physician to St. George's Hospital.

[Continued from page 8.]

ON DIABETES.

In my lecture to-day, gentlemen, I purpose bringing before you that disease which is more especially related to the non-nitrogenous organic constituents of our food. You have already seen, in my lecture on milk, that sugar is a substance which is occasionally formed by a perfectly healthy action in the human body. In that lecture you may remember, I took especial care to point out that sugar was always found as a constituent of milk, existing as milk-sugar, and forming from four to six parts in every 100 parts of milk.

Quantity of Sugar in Human Milk.

	Maxima.	Minima.
Casein	45·2	19·6
Sugar	62·4	39·2
Butter	54·0	8·0
Ash	2·7	1·6
Sum of solids	138·6	86·0
Water	861·4	914·0
	1000·0	1000·0

The sugar of milk is the product of the healthy action of the body, and if sugar was absent from the milk, it would be in an unhealthy state. I showed you that milk sugar undergoes changes after it has passed out of the body. The sugar, indeed, is changed into lactic acid, when the milk becomes acid, so that we have acidity where there was formerly sweetness. If, instead of being exposed to the action of a ferment, the sugar of milk was acted on by a powerfully oxidizing agent, then carbonic acid and water would be produced. You will remember that sugar is also a constituent of our food, being always present in some portions of the vegetable food which we eat. This Table represents the quantity of starch and sugar in the various vegetable substances there named:

Quantity of Starch in 100 parts of

Rice flour	84 to 85	Pea-flower	30 to 40
Barley „	67 „ 70	Bean „	35 „ 45
Wheat „	39 „ 77	Potatoes	10 „ 20
Rye „	50 „ 60	Buck wheat	50 „ 55
Oat „	70 „ 80	Iceland moss	40 „ 50
Maize „	77 „ 80		

Quantity of Sugar in 100 parts of

Barley meal	5 to 6	Figs	60 to 65
Oat „	8 „ 9	Plums	11 „ 12
Wheat „	4 „ 8	Pears	6 „ 11
Bread	3 „ 4	Gooseberries	5 „ 8
Rye meal	3 „ 4	Cherries	16 „ 18
Maize	1 „ 2	Apricots	10 „ 12
Rice	1 „ 2	Beet-root	5 „ 9
Peas	2 „ 3	Milk	4 „ 6

In my lecture on flesh I also pointed out, that not only was there a nitrogenous substance present in flesh, together with salts and water, but that it contained also a non-nitrogenous organic substance; and that Professor Scherer discovered that even the muscle, in a state of perfect health, contained portions of a peculiar sugar, which he called inosit. Nor are these all the sources of sugar. You remember, in my lecture on the saliva, I, by especial experiments, pointed out to you that the action of the saliva on the starch, which we take as food, is similar to the action of a ferment, and causes it to undergo a change into sugar; and I showed you how easily this sugar could be found. Since then I have made some experiments on the rapidity with which this conversion occurs; and I find, that if you take a portion of pure starch, and hold it in the mouth for only two minutes, you can obtain distinct and decided traces of sugar. I have here a solution of starch not treated with saliva; and, if I employ my test for sugar, which you well know, (sulphate of copper and liquor potassæ,) I shall have no reduction of the oxide of copper; but, in this other mixture of starch and water, which has been held in the mouth for two minutes only, you may see distinctly a beautiful red line of reduced copper, the evidence of the presence of sugar. If the starch is left in the mouth for three minutes, a still more manifest action is apparent, as in this tube; and, if it remains there five minutes, there is, as you see, a distinct mass of reduced copper, which is proportioned to the quantity of sugar formed out of the starch. In making these experiments, no heat has been employed to hasten the reduction; these mixtures were tested yesterday, left at the temperature of the laboratory during the night, and this morning the reductions were apparent. Thus, then, there are many sources of sugar in the body. It is found, for the most part, in vegetable food already formed; it arises from the action of saliva on starch. It is present in considerable quantity in milk, and minute traces of it are contained in muscle; but still further, you will remember, in my lecture on Bile, I showed you that sugar is always produced by the action of the liver. I must refer you to the diagram, which I have exhibited at a former lecture, showing the relation of fat to the bile, indicating that perhaps the fat acid, by the action of the liver, is changed into the bile acid, while the glycerine is changed into sugar and water. Whether this be a true representation or not, it is certain that we have a large quantity of fat going into the liver by the portal vein, and a large quantity of sugar coming out by the hepatic vein. I pointed out that this sugar is always found in the liver, not only when vegetable food, but even when animal food alone is taken.

Having thus spoken of the sources of sugar in the body, I may now come to that state of disease in which sugar exists in large quantity in the secretion of the kidneys, in which, in health, none should appear. In this respect the secretion differs from milk, which contains sugar when in a state of health, and would be unhealthy if it did not contain it. If the urine contains sugar, it is in a diseased state. In certain cases of disease, a very large quantity of sugar is thus thrown out of the body. It can be separated, weighed, and analysed with considerable exactness. It is found to have the same composition and the same re-actions as starch sugar. If I take a portion of this urine, which I have good reason to know contains sugar, and test it with sulphate of copper and liquor potassæ, I get first a beautiful blue solution, and afterwards, by heating it, (the same result would be obtained by letting it stand long enough in the cold,) the change takes place which you have so frequently seen, the blue colour becoming slightly yellow at the surface, and rapidly changing into that reddish yellow precipitate which is the mixture of the colour of the urine and the colour of the sub-oxide of copper. This is one easy test of the presence of sugar. If this test gives a negative result on repetition, you may be sure that in that specimen of urine no sugar is present. If a positive answer is given, as in the above experiment, some additional test ought always to be employed. For, by the use of the sulphate of copper test alone, very many and great mistakes have been made. With perfectly healthy urine, this test would produce no change. But it may occasionally happen that urine may be passed which will give a reduction similar to that which I have shown you, which might be confounded, and has to my knowledge been confounded, with the reduction produced by sugar. If I take urine very much loaded with urea,—and such a specimen I have here,—and apply my test, I shall find that the first part of the test (for I may divide it into two parts) will take place,—there will be a formation of the beautiful blue colour. Urine saturated with urea; that is, with organic matter in solution, will give no precipitate of hydrated oxide of copper on the

first addition of the liquor potassæ. Urea, like sugar and other organic matter, hinders the hydrated oxide of copper from being precipitated; and thus I have a beautiful blue solution formed But if I heat this, I shall not get anything like the rapid reduction which you saw take place when sugar was present. It is true I shall get a change by heat, but the reduction will now be slow; and it is on the quickness of the reduction of the oxide of copper that the test for sugar depends. (Experiment). If I take a portion of urine containing an excess of urates as well as urea, I shall not only get the blue colour formed, but I shall have a reduction very much more distinct than with the urea alone, but it will not take place quite so quickly as if sugar was present; it may be so quick, however, that a mistake may be made regarding the presence of sugar. I have here such urine, containing a great excess of the urates. If I boil it after the addition of the sulphate of copper and liquor potassæ, a change of colour will ensue, and a reduction will take place. If urine be examined very soon after it is passed, it often contains so great an excess of urates, that a very considerable reduction will occur on the use of the test. The employment of a second, and in doubtful cases of a third test can alone save you from saying that sugar is present when it is absent from the urine.

What, then, are those other tests which should be used in addition to the reduction of the oxide of copper? Another metal, instead of the salt of copper, may be used for testing the presence of sugar in the urine. I will take a salt of silver—nitrate of silver—in solution. If I add to a strong solution a drop or two of ammonia, so as to separate the oxide of silver, and then take one drop of diabetic urine, a remarkable change will take place on the application of heat. You will see that the grape sugar will take away the oxygen from the oxide of silver, and the metallic silver will be thrown down, which will adhere to the sides of the vessel, and will produce a most beautiful silvering of the glass. (Experiment.) The silvering, indeed, is as perfect as you could produce by the essential oils which are used for this purpose. It only wants a little care and time for a little brisk agitation of the test-tube for the experiment to be successful.

There is another good test for the presence of grape-sugar, and especially for its presence in urine. If I take a portion of urine containing grape-sugar, and add caustic potash to it, and heat it, a remarkable change will ensue. It will become first brown, and then assume a reddish colour, becoming more and more intense as the heat is continued. We have certain acids produced by the action of the liquor potassæ, more especially melassic acid, which combines with potash, and gives this remarkable colour which you see. (Experiment.) But, like all other tests, this has its fallacies, for there are other substances which may be present in the urine, and which may give this darkening of the colour. I showed you that a slight change of colour takes place when pus or albumen and liquor potassæ are heated together. The darkening, however, is not so deep red as it is when sugar is present. You must not trust, then, to this liquor potassæ test alone, but you must use it in conjunction with other tests. A very easy test is the microscopic appearance of a drop of urine placed on a slip of glass and left to dry; when sugar is present the residue presents most remarkable tufts of stellated crystals. A curious instance of the discovery of sugar in the urine was mentioned to me by a medical gentleman of Antigua. He observed that the sugar ants infested the water, and thereby he discovered the complaint.

When the presence of sugar in the urine is determined, a very important question arises, as to how much sugar is present. For the purpose of determining this, many processes have been adopted. The simplest way (it is a very imperfect way, yet it is sufficient for the medical man), is to determine the quantity of urine made in 24 hours, and to ascertain its specific gravity. The quantity of sugar will be in direct proportion to the quantity of urine, and the increase in the specific gravity. But this is by no means sufficient for the chemist. The urine may be placed in a little glass vessel, closed with a cork, through which a tube containing chloride of calcium passes, and fermented with yeast, which will give rise to carbonic acid and alcohol, and this method also may be used as a test of the presence of sugar, as well as for its quantitative determination, if a comparative test is made with yeast alone. In this way this alcohol has been obtained by Dr. Macintyre, of the specific gravity of ·832, from diabetic urine. The quantity of carbonic acid passing off may be weighed and accurately determined. No water would be lost, because it would be caught up by the chloride of calcium. Knowing the quantity of carbonic acid going off, we can calculate how much sugar must have been present in the solution. This is by no means a bad way of determining the quantity of sugar which is present; but it is still better to determine also the quantity of alcohol in the residue, after fermentation. A standard solution of sulphate of copper, tartrate of potash, and caustic potash, has been prepared and published by Fehling, as a quick method of determining the amount of sugar in diabetic urine. It requires considerable skill to obtain trustworthy results.

But, within the last few months, an apparatus has been perfected by M. Soleil, far more convenient, and infinitely more easy of use than the processes I have shown you, which take many hours to conduct, and require some degree of skill to use. I have here this apparatus for determining the quantity of sugar in any solution; and it depends upon this principle,—that a solution of sugar has the property of altering the plane of polarisation, causing it to rotate to the right or to the left, according to the nature of the sugar. Solutions of different strengths produce different amounts of rotation. The apparatus is only a means for determining the degree of rotation by the principle of compensation. It consists, 1st, of a polariser; 2ndly, of a tube for holding the solution to be analysed; and, 3rdly, of an analyser. The polariser is a prism of Iceland spar. The extraordinary rays alone are passed through a circular plate of quartz, composed of two half circles possessing equal and opposite rotatory power; from thence the light passes through the solution of sugar. Any solution of grape-sugar, as I have said, will alter the effect of the light which has passed through these two semicircular plates, when examined by the analyser, which is an ordinary double refracting prism; and the alteration will vary with the strength of the solution of sugar. The light which passes through the two semicircular plates, when analysed before the solution is put in, will be of the same colour; but afterwards there will be a great difference between the colour of the two plates, and, by means of an admirably-contrived compensator, the difference between these two colours can be measured. The compensator consists of two wedges of quartz, the thin edges touching, so that they can be slipped across each other, and, when brought together, they will be of a uniform thickness, and, together, they will produce an equal and opposite effect to a single plate of quartz placed before them. By means of a little screw you can alter the thickness of the two wedges, by separating or closing them; and according to the thickness will be the re-action upon the other plate, which has a fixed and determinate rotation in the opposite direction. The colours, you know, vary according to the thickness of the layer of quartz. I can draw the two plates one upon the other, so that they may neutralise the single plate, or separate them so much that they will give entirely different re-actions with the light that comes through from the polarizer. In this way, when any solution containing sugar is introduced, it is possible to measure how much it is necessary to slip one wedge over the other, so as to make the colours the same as they were before the solution was introduced. A graduated scale is provided for this purpose, in connexion with the apparatus, and by means of standard solutions, in which the quantity of sugar was known, the value of each degree has been determined. With a tube for the solution 7·88 inches long, (= 20 centimetres,) one hundred divisions of this scale correspond to 3482.37 grs. of diabetic sugar in one pint, fifteen ounces, and one drachm of urine; so that a solution of any unknown quantity can be placed in the apparatus, and, by moving the scale, the amount of sugar can be accurately determined; and with colourless solutions this may be done in the course of five minutes. When urine is tested, it must be mixed in a bottle with a little sub-acetate of lead, so as to take away its colour without affecting the sugar. It is then filtered, and a clear solution passes through, of which I have here a specimen. This solution is placed in a small tube, about eight inches long, and accurately filled. The tube is closed by means of a plate of glass with a screw. The tube is placed in the instrument, the scale having been previously brought to zero. Before the solution was placed in the instrument, the colours on the two semicircular plates, as I have explained, would be precisely the same: but the effect

of the liquid would be to change them, and the degree of change is ascertained in the manner I have described.

No Sugar.

Sugar Fifty per Cent.

Scale moved Fifty Degrees.

The most perfect results can thus be obtained; and I know nothing superior to this beautiful instrument; it is a perfect triumph of instrumental art.

Having thus spoken of the tests by which sugar can be discovered, and also of the means for determining the quantity present, I come now to the nature of the disease, and to the cause of the appearance of sugar in the urine. Whence does this sugar come? This is a problem which is not yet solved. If you were guided by analogy, you would say, as milk sugar is formed by the action of the mammary glands of carnivorous animals, or grape sugar by the liver, so diabetic sugar, in cases of disease, is formed by the action of the kidneys. Whether we shall return to this ancient view of the nature of diabetes is doubtful. At present, the inquiry into the nature of the disease sets out from a different point of view, in which the kidneys are considered as having no action whatever in the production of the disease. The most important arguments in favour of this view will be given by the following statement of the knowledge which we at present possess:—It is quite certain, that if you stop a person who is passing diabetic urine from taking vegetable food, you can materially lessen the quantity of sugar in the urine. If I stop a quantity of sugar from going in, it is certain that I lessen the quantity of sugar coming out. But it must be remembered, that the starch which enters the body is converted into sugar; and thus, if starch is prevented from going into the body, the quantity of sugar in the urine will be still more materially lessened; so much so, that M. Thenard stated that animal diet was as decided a remedy for diabetes as quinine was for ague. There is no doubt that quinine cures intermittent fever; but no abstinence from starch and sugar will cure diabetes. Moreover, no absolute abstinence from starch and sugar will stop all the sugar from appearing in the urine. And why is this? I have already told you, that the liver forms sugar in a state of health, even when no starch or vegetable substance is taken as food, so that by the strictest diet you cannot altogether stop its appearance in the urine. You can lessen it, but not entirely stop it, so long as the action of the liver continues. The liver, when no vegetable food is taken, continues its action, changing some principles of the food into sugar, which afterwards can be found in the urine. Moreover, in the muscles there are minute traces of sugar; so that if a patient is kept upon animal food alone, some small portion of sugar is taken even when animal food only is eaten. We are led, then, to the following statement of the nature of diabetes. The disease consists in an arrest of those changes in the sugar which should take place in the body in a healthy state. In health the sugar undergoes changes into other substances; it does not remain as sugar in the circulating blood, and therefore no sugar ever passes off in healthy urine. I say that in this disease, the sugar, from whatever source it comes into the blood, does not undergo its proper changes; it goes into the blood, remains there as sugar, and is thrown out as such in the urine. Now, what are the changes that occur in a state of health? The starch going in is changed into sugar; the sugar is changed into organic acid, as lactic acid, and ultimately it is converted into carbonic acid and water, passing out by the lungs. But not only is lactic acid produced; many other acids, as acetic acid, butyric acid, formic acid, and even valerianic acid may all arise from the changes which the sugar undergoes. We do not know why the sugar undergoes these changes in health. The changes are not yet fully known, much less the causes of the changes. It is in the highest degree probable that the alkaline state of the blood promotes the changes, just as the alkali in the test for sugar with sulphate of copper caused the oxidation of the sugar which took place. I say there is little doubt that the alkali in the blood has, in health, a decided action in causing these starchy and saccharine substances to be thus changed. See, then, the relation of these changes to diabetes. In diabetes we have the starch going in, and being changed into sugar, and into nothing further.

Changes in Non-nitrogenous Organic Substances.

In Health.	In Excessive Acidity.	In Diabetes.
Starch	Starch	Starch
Sugar	Sugar	Sugar
Lactic acid	Acid	—
Carbonic acid	—	—

This diagram shows the changes which take place in non-nitrogenous organic substances in a state of health: the starch undergoes a change into sugar, lactic acid, and carbonic acid. But there is another state which I have mentioned in a previous lecture,—that of excessive acidity,—in which the changes do not go so far as they do in health; the changes are starch, sugar, and organic acid, not going so far as carbonic acid, but producing only lactic acid, acetic acid, formic acid, and perhaps oxalic acid, &c. I have already spoken of urine possessing an intensely acid character. I have here urine which was passed some months since, but which has never yet gone on to putrefaction, but remains as intensely acid as it was the first day it was passed. This intense acidity appears to be the intermediate state between a state of health and a state of diabetes. I have watched these cases of excessive acidity, to try and find whether occasionally I could not discover sugar to be present; but as yet I have not been successful, though there is no doubt that a state of extreme acidity not unfrequently goes before the diabetic state. But I cannot find that diabetes very often alternates with a state of excessive acidity. As yet I have not met with many well-marked cases of this alternation. However, in the treatment of cases of excessive acidity, I find the same difficulty as in cases of diabetes,—a difficulty in causing the sugar or the acid to change into carbonic acid and water. I want some means of making the sugar and acid undergo these changes. In two or three cases of excessive acidity, I have given alkalies, and kept the urine alkaline for weeks; but, as soon as the treatment was left off, in two days the urine has deposited uric acid in considerable quantity. Even when a patient has been kept on this treatment for months, I have had a considerable quantity of uric acid thrown down two days after the treatment had ceased. Occasionally excessive acidity seems to me to be nearly as difficult to cure perfectly as diabetes; and that there is the closest relation between the two states, I hope to make more evident at some future time, but I have not obtained the full proof of their relation now. Nor can I now explain the reason why, in diabetes, the changes of the sugar do not take place as in health. M. Miahle considers that the sole cause of the disease is the absence of sufficient alkali from the blood. Others think that the disease arises from faulty action of the liver. I have already stated, that the liver is undoubtedly the source of one portion of the sugar: but I cannot consider that diabetes is caused by excessive formation of sugar in the liver. The cause of the arrest of the healthy changes of the non-nitrogenous organic substances has yet to be discovered.

There is no doubt that alkalies have formed the most beneficial part of the treatment of diabetes. Alkalies, in considerable quantity, have as yet proved more beneficial than any other mode of treatment; at the same time, substances should be given which cannot form sugar, and especially fatty substances, which can be used in the process of respiration. The patient may thus even gain in weight, and the disease be materially checked. In slight cases, occurring in very fat patients, especially where the disease has manifestly some relation to gout, alkalies are far more effectual than in the more severe and confirmed cases in which there is great emaciation.

Within the last few months, M. Bernard has given us some new experiments, which I ought to mention here, because they also bear upon the view which I have taken of the nature of diabetes. His latest experiments were made on the urine of the fœtus, in which free respiration is not carried on. He finds that the urine of the fœtus of cows and sheep always contains sugar. In 150 cows and sheep, the fœtus of the cow varying from 4 to 7 months old, and the sheep from 6 weeks to 2½ months, the urine passed by them always contained distinct evidences of the presence of sugar, — sugar which fermented with yeast, giving alcohol and carbonic acid,—which became brown with alkalies, and reduced the oxide of copper. The urine of fœtuses at the full period was not examined. (See *Gazette Méd.*, March, 1851.) Moreover, he found that the allantoic and amniotic fluid of the cow, sheep, and sow, contained a quantity of sugar. Here, then, no sugar could come from the food, because these animals had as yet taken no food into the stomach; but the liver is large, and in full activity, and there is little doubt that the action of the liver is the cause of the appearance of this sugar in the fœtal urine. But why does the sugar not undergo further changes in the fœtal blood? It seems to me here also possible, that the state of the respiration of the fœtus may be the explanation of the cause why the sugar is found in these animals at this time of life. That M. Bernard's observations are correct I have no reason to doubt, and they will be most important in helping us to arrive at a true knowledge of the nature of diabetes. Previously to this, M. Bernard had made a remarkable experiment, which I had hoped to show you here, but, unfortunately, I am not successful. He found, if the brain of a rabbit was punctured exactly at the origin of the nerves which supply the respiratory organs—the pneumogastric nerves—if a sharp instrument, as an awl, punctured this part of the brain, in three hours afterwards, the urine would give distinct evidence of sugar being present. I have here urine thus obtained after puncturing the brain. I wish I could show you a satisfactory proof of the fact stated by M. Bernard. I have not failed from want of trying the experiment often, yet I have not been able to satisfy myself of the presence of sugar. That a change takes place in the urine is true; but, on testing this urine, it will not quite satisfy you. I will test it with sulphate of copper and liquor potassæ. A change of colour takes place,—a certain degree of brownness, but not that reduction which can satisfy me or you that grape-sugar is present. I have seen M. Bernard perform this experiment. The reduction of the oxide of copper was very marked and rapid, and he told me that he had obtained alcohol and carbonic acid by fermentation. That this experiment has not failed by puncturing the wrong spot, the present position of the awl in this head will show. M. Bernard stated to me, that if the rabbit fell, or received a heavy blow of any kind, the sugar occasionally disappeared; but this was not the cause of my failure. I cannot, however, doubt that M. Bernard, by puncturing the origin of the pneumogastric nerves, has occasionally caused sugar to appear in the urine of animals. His explanation is, that he exalts the function of the liver,—that the irritation of the pneumogastric nerves acts on the liver, causing the formation of an immense quantity of sugar; but to me this explanation is not satisfactory. I think it is more likely that the sugar may be excreted in consequence of some injury to the respiratory process, rather than of the increased function of the liver.(a)

We may then sum up this lecture shortly thus. Sugar, we have seen, may come, and does come into the blood from vegetable and animal food. Each moment in health the liver is forming sugar. Whencesoever the sugar may come in health, it is changed into organic acid, and ultimately into carbonic acid and water. In diabetes, from some unknown cause, the sugar in the blood is not changed; it is thrown out as sugar. We may stop all the starch and sugar from going in as food, and thereby lessen the quantity of sugar thrown out in the urine, but there still remains the sugar which is formed by the liver; this is unchanged, and still passes off in the urine. The nature of the disease will be fully understood when we know why it is that the sugar which comes from the food and from the liver does not undergo those changes which it does undergo in the state of health; and when we can find the means which will cause these changes to take place, then the certain cure for diabetes will be found. The discovery by M. Bernard, of diabetic urine in the fœtal state, in my judgment, points to the want of oxidation as the cause of this disease; and as gout partly is caused by a want of oxidation of uric acid, the representative of the albuminous principle, or the nitrogenous substance, which is passing out of the body, so perhaps diabetes may be taken to result from an arrest of the action of oxygen on the non-nitrogenous constituent of our food.

In my next and last lecture I purpose dwelling on the relation of the expenditure to the income of the body.

(a) In the *Comptes Rendus*, Oct. 20, 1851, M. Alvaro Reynoso takes the same view, and states that anæsthetic agents cause sugar to appear in the urine. I lately had an opportunity of examining the urine of a patient in St. George's Hospital, who for three days was under the influence of chloroform, and who was given much arrow-root; if sugar was present in the urine, it was in such small quantity that I could not be certain of its presence.

In the *Comptes Rendus*, Nov. 10, 1851, M. Reynoso says that bichloride, iodide, and sulphuret of mercury, salts of antimony, opium, and sulphate of quinine, cause sugar to appear in the urine; the quantity of sugar produced must be very minute.

In the *Comptes Rendus*, Nov. 17, 1851, M. Bouchardat repeats, that in two slight cases of diabetes, the inhalation of oxygen removed the sugar from the urine.

In the *Comptes Rendus*, Dec 1, 1851, M. Reynoso says that arsenic, lead, sulphate and carbonate of iron, cause sugar to appear in the urine; also, that in patients suffering from phthisis, pleurisy, chronic bronchitis, and asthma, hysteria, and epilepsy, he has found sugar in the urine.

ORIGINAL COMMUNICATIONS.

REMARKABLE CASE OF GESTATION.

By W. FOLEY, M.D.

I beg to submit the following novel case to the Profession, in the hope that some of the numerous readers of the *Medical Times and Gazette*, practising the "obstetric art," may have an opportunity of stating the extent to which they have observed such deviations from Nature's usual proceedings.

It is unnecessary to point out the importance of so peculiar an occurrence in a medico-legal point of view; or the danger to which the character and liberty of a female, and those that may be suspected as her accomplices, might be most unjustly exposed.

I was called up at night to a patient of mine, (the mother of seven children,) towards the end of last May, and found her labouring under severe uterine hæmorrhage, with strong uterine action; the countenance and pulse giving clear indication that the discharge had been very profuse, though not of more than half or three quarters of an hour's continuance. She described herself as having reached the third month of pregnancy, and felt, although completely differently from what she had ever done on any former occasion; had a peculiar and overpowering drowsiness,—so much so, that when she sat at table with her family, she had the utmost to do to refrain from sleeping at meals; an unusual sense of fatigue; an indescribable disrelish for any kind of food. She attributed this attack to having accidentally struck the back of her neck against the slab of the mantelpiece the day before, when suddenly rising from a stooping position. She was stunned for a moment, and then had considerable pain in the part struck; the pain and fright continued up to the time the flooding commenced.

I gave her a full dose of tincture of opium; had her lightly covered, kept cool and quiet; gave her diluted sulphuric acid and acidulated drinks.

So relieved was she after a couple of hours, that I went to bed, leaving directions to be called at any moment that was necessary.

On visiting her in the morning I found that a firm, fleshy, organised mass, the size of an ordinary egg, had come quietly away, the sanguineous discharge continuing moderately, such as after an abortion. I cut open the tumour to ascertain if it contained a fœtus, or the rudiments of one, and found that it was simply a "mole." I remarked to the patient, "I am happy to tell you, you have not lost a child in this." Her reply was, "I believe not, I always felt as if it was a false conception."

The lochial discharge went on for the remainder of that day and ceased. She left her bed on the third day, and complained of being more weakened than after any regular lying-in.

On the sixth day, and for each day of a week after, she

complained of gnawing pains through the abdomen, and frequent discharges from the uterus, of black, offensive, grumous material. I gave her occasional doses of mild mercurial aperients to relieve the organ, as also instructions to wash out the vagina with warm water three or four times in the day. All went well in a little time.

In six weeks after, she said to me, "What do you think,—I feel something stirring inside; I am certain I am in the family-way." I replied, "It is possible, but not at all likely; if it be so it will soon discover itself."

I made an examination with the stethoscope in two or three weeks after, but, owing to a well-furnished omentum, I could not discover either the placental murmur or the pulsation of the fœtal heart. I smiled on giving up the examination, when she observed,—"You may smile, but I know it is as I say; however, I must admit it is not as strong as children usually are with me at this time."

Matters went on without any complaint until the morning of 25th November, (ult.) when I received a hurried message that "the waters came away."

On making a visit, I found it had been so, but no pain succeeded for some hours; a few occurred through the day at long intervals: she slept the night, and complained but little during the following day up to 3 o'clock, p.m., when smart labour came on, and soon caused the birth of a perfectly formed but very small and weakly child, that lived for three days; it was scarcely able to swallow food, and suffered severely from convulsions until its death.

The patient has been quite well ever since.

If the above circumstances befel an unmarried female, I should think it would not be difficult to find many who would deny the possibility of a uterus retaining an impregnated ovum under such a state of things, and consequently assert, with no trifling confidence, that the small and delicate child was, and could be nothing less than an abortion, procured in all likelihood by unfair means.

Two important physiological questions may be here propounded:—Can a "double conception," contradistinguished from "super-fœtation," take place in the human uterus? Could the uterus cast off one, and retain the other, bringing it to maturity?

Kilrush.

FLUID BRONCHOCELE.

By T. W. WANSBROUGH, M.D., M.R.C.S. Eng.

A gentleman, aged 30, from Jamaica, came to England with a large bronchocele, in the hope of being cured by operation, the surgeons of the former island declining to undertake it. He consulted Sir Astley Cooper, who pronounced it bronchocele, but "not fluid." At this time the tumour extended to the chin, impeding deglutition and respiration. Being an old schoolfellow of mine, he became an inmate of my family, visiting Sir Astley occasionally. That eminent surgeon could not assist him. He also declined to operate; and, as the discutient property of iodine was not then known, (now thirty-eight years since,) my friend was left to his fate. I pronounced the tumour an encysted fluid bronchocele; and, after a lapse of a month, the difficulty of breathing threatening suffocation, I took him by surprise, and, measuring the depth, I plunged a lancet into the cyst, when there issued a jet of chocolate-coloured fluid, to a distance of two feet, which filled a pint porringer. The os hyoides and cartilages of the trachea were distinctly felt through the flaccid integuments. My friend was utterly astonished at the proof of my opinion, thus ocularly demonstrated, and delighted at the freedom of swallowing and breathing consequent on the removal of the previous severe pressure on the trachea and œsophagus. Three weeks subsequently, the tumour had increased to a fourth of its original size. I passed a seton through it, which discharged the contents; inflammation and suppuration succeeded, the cyst was destroyed, and in six weeks my patient was completely cured, and returned to Jamaica in perfect health. I also performed the same operation on a married lady, with the same results. I must state, in justice to the memory of Sir Astley Cooper, that he generously and candidly awarded to me more credit than I felt I deserved in the case, as it was the first on record.

26, Campden Grove, Kensington.

ON THE TREATMENT OF POLYPI OF THE EAR.

By JOSEPH TOYNBEE, Esq., F.R.S.,

Fellow of the Royal College of Surgeons of England, Aural Surgeon to St. Mary's Hospital, and Consulting Surgeon to the St. George's and St. James's General Dispensary.

(Continued from page 15.)

Previous to detailing some cases of vascular polypus in which the potassa cum calce was used to destroy the diseased growth, it will be well for me to make a few further observations respecting the treatment usually adopted in such cases by extraction, or rather by attempted extraction.(a) The disadvantages belonging to the attempt at a removal of this disease by extraction are—

Firstly. The impossibility of removing the whole of the mass on account of its soft texture, and the destruction of a portion only, is followed by its rapid regeneration.

Secondly. In many patients the vascular polypus co-exists with, and is indeed symptomatic of, more deep-seated disease in the bone or brain, and any attempts at removal, by using force, are liable to originate an irritation of the bone, which may extend to the brain and rapidly terminate life.

In cases where the polypus reaches nearly as far as the outer orifice of the meatus, it is desirable that a portion of the diseased growth should be removed by a pair of curved scissors, as recommended by Mr. Wilde, or by the use of the snare, as described by the same gentleman.(b) It is better, however, not to attempt to remove the growth by cutting through the roots, inasmuch as, after this proceeding, an escharotic must be applied to ensure the entire destruction of the mass. It will be remembered, that the roots of the polypus are very sensitive, and the application of the potassa cum calce to them is productive of very acute pain; and what is still more important, it is very difficult to keep the escharotic from touching the meatus, and inflammation, and even ulceration, of this delicate structure may arise from such an occurrence. The great advantage which will be found to accrue from the application of the potassa cum calce is, that it not only destroys the portion of the polypus to which it has been applied, but after a few applications it seems to overcome its tendency to increase, and ultimately to cause the roots to disappear without the escharotic being applied to the roots themselves.

VASCULAR POLYPUS NEAR THE MEMBRANI TYMPANI.—SINGING IN THE EAR.—POWER OF HEARING DIMINISHED.—TREATED WITH POTASSA CUM CALCE.—CURE.

Case 1.—Mr. W. L., aged 40, was sent to me on the 21st of July, 1850, by Mr. Cock, of Guy's Hospital. He was a large, strong man, and in good health. He states, that five or six years ago he found that he was dull of hearing in the left ear, this dulness was removed by the use of the syringe, which brought away a considerable quantity of cerumen. He remained without cause of complaint until three months ago, when the same symptom returned in the left ear. He was again in some measure relieved by syringing, but this operation was followed by a discharge of a very offensive character, attended by a sensation of singing in the ear. He has at times complained of slight pain in the ear. Upon examination the meatus was found to be full of matter, which, after being removed, was seen to consist of adhesive mucus, mixed with epidermoid cells, the latter giving a milky aspect to the matter. The former presented numerous small flocculi, or rather little particles of cotton-thread, from a line and a half to three lines in length. Upon examination of the meatus after this mucous fluid was removed, a polypus of a red colour was observed. It was situated deep in the meatus, of which it apparently occupied the inner fourth, entirely obstructing a view of the membrana tympani. The power of hearing was much diminished,—the watch which I have some years used as a test of the hearing of patients not being heard, except when pressed upon the outer ear. From the treatment, of similar cases, I felt that it would not be desirable to attempt a removal of this mass by instruments, not only on account of the soft texture of the polypus, and from its extreme sensitiveness, but also

(a) It will be seen in a subsequent paper, that the objections to extraction do not apply to the removal of the gelatinous polypus.

(b) On the Causes and Treatment of Otorrhœa, *Dublin Journal of Medical Science*, January, 1851.

from the uncertainty as to what part the roots of the polypus were attached; and I felt that, if it were fixed to the membrana tympani, the use of any force might prove injurious to that organ. Having since ascertained, by dissections,(a) that the dermoid layer of the meatus is continuous with the dermoid lamina of the membrana tympani, it appears desirable, on this account also, not to use any force to a polypus attached to the vicinity of the membrana tympani, as a laceration of the meatus is likely to extend to the membrana tympani.

July 21.—The potassa cum calce was applied to the surface of the polypus in the way previously described; in the course of a minute, the whole of that part of the polypus which could be seen became of a livid hue, and, when the ear was syringed with tepid water, five minutes afterwards, numerous small particles of the polypus, softened and disintegrated, were brought away. The patient complained of but very slight pain, and this entirely disappeared upon the use of the syringe.

July 29.—The polypus is smaller and less red; the discharge from the meatus very copious. The potassa cum calce was again applied, with similar results.

August 13.—The polypus is observed to be much smaller. Instead of the mass which, at the first examination, had an appearance like a raspberry, there was now only a rounded button, about a line and a-half in diameter. The potassa cum calce was again used.

October 18—The discharge is much diminished; its odour is less fetid; polypus nearly gone; the power of hearing is much improved.

Nov. 13.—Since the last visit, a lotion, composed of a drachm of tannin to eight ounces of water, has been used twice daily; the discharge has now nearly disappeared, and consists almost entirely of epidermoid cells. The only vestige of the polypus consisted in the presence of two very small buttons, each of the size of a small pin's head; these were attached to the upper part of the membranous meatus, close to the membrana tympani.

Nov. 29.—The use of the injection has been continued; the polypus has entirely disappeared; the singing noise has ceased; the surface of the membrana tympani is dull. Hearing distance of the watch six inches.

The features of interest in this case appear to be: Firstly, that, although the escharotic was only applied at intervals of several weeks, the polypus did not increase in those intervals, but, on the contrary, it gradually diminished. Secondly, With the destruction of the polypus, the singing entirely disappeared. Thirdly, The return of the power of hearing to so considerable an extent.

DISCHARGE FROM THE LEFT EAR DURING MANY YEARS.—GIDDINESS.—POLYPUS; TREATED BY POTASSA CUM CALCE.—CURE.

Case 2.—The Rev. H. C., aged 40, consulted me on the 21st of April, 1851. His constitution was not robust, he having spent some time in India. The history of his case is, that the left ear has been deaf from childhood, that since early life he has been troubled by a discharge of offensive matter from that ear, and that lately he has complained of attacks of giddiness, especially upon suddenly rising from his chair. Upon examination a red polypus was observe to fill the inner half of the meatus. The same treatment was adopted in this case as in the last, with the exception that, as the patient lived in the country, he had the potassa cum calce applied two or three times in the space of nine or ten days, and then a longer interval elapsed before it was again used. The same result, however, ensued, and at the end of six months the polypus had disappeared, and the symptoms of giddiness wholly vanished.

In another case, that of a patient, aged 26, where the polypus filled the whole of the meatus, portions were removed by forceps, and the remainder destroyed by potassa cum calce. The symptom of interest in this case was the production of giddiness by pressure on the outer part of the polypus.

In cases of polypus, which co-exist with catarrhal inflammation of the dermoid meatus, it is desirable to keep up a slight counter-irritation, by vesicating paper over the mastoid process, while the polypus is being treated by the potassa cum calce. In order to remove the unpleasant odour of the discharge, an injection, composed of one part of the solution of chloride of lime to twelve parts of water, may be used three or four times daily.

[To be continued.]

(a) See, by the Author, "On the Structure of the Membrana Tympani in the Human Ear." Philosophical Transactions, Part I., 1851.

PLEURISY, EFFUSION, PARACENTESIS THORACIS

TWICE PERFORMED.—RECOVERY.

By JOHN B. STEDMAN, Esq., F.R.C.S.

R. D., a plumber, aged 19, states, that three months since, when at Brighton, he had an attack of what was termed inflammation of the lungs; but, from the relation of the symptoms and the sequel of the attack, it was evidently pleuritic. He never entirely recovered, and his medical attendant ordered him to his native air. Having exposed himself at night he was again seized with pain in his left breast, the cough and dyspnœa increased, with pyrexia, etc., etc. After enduring this for some days, and finding himself getting worse, he consulted me on the 18th October. All the evidences of effusion into the pleural cavity of the left side existed in a marked degree. Inability to lie down, resting himself on the affected side; dulness on percussion over all the left side of the chest posteriorly and anteriorly; no motion of ribs in respiration; absence of respiratory murmur; an occasional though masked œgophony; displacement of the heart; a bulging of the affected side, with absence of intercostal depressions, are symptoms following an attack of pleurisy too unequivocal to be mistaken. He was immediately blistered, had saline purgatives and diuretics, with blue bill, which produced plenty of watery evacuations and an abundant supply of urine, but all to no purpose; the symptoms increased to an alarming degree, the heart's impulse could be perceived beating beneath the right breast; the countenance became livid; pulse, 140, fluttering, and he positively gasped for breath; suffocation was impending. I proposed paracentesis thoracis as the only chance of saving his life, which was willingly acceded to. An exploring needle was inserted between the fifth and sixth ribs, upon the upper surface of the latter, and serum poured out. A valvular incision was then made, and a large trocar and canula introduced, and eight pints of clear serum drawn off, which on cooling contained a large mass of fibrin. It flowed freely at first, but after a time slackened, when the finger was placed over the canula at each inspiration to prevent the ingress of air. After all the fluid had been evacuated, a piece of lint and strapping were applied over the wound, and a flannel roller round the chest. The relief was what might have been expected from the withdrawal of so large a quantity of fluid: the countenance became natural, the breathing quiet, the pulse fell in frequency, and was distinct in its pulsations; and in about half an hour after the operation, the patient exclaimed he felt something move in his chest. Upon examination, the heart was found to have resumed its natural position. For the first three days after the operation, everything progressed as well as could have been hoped. The left lung resumed its duty; the pulse fell to 96; the breathing continued natural; he slept well on either side, or on his back, and his countenance was free from anxiety. Then dulness on percussion posteriorly, with masked respiratory murmur, a drum-like resonance anteriorly, hurried and laborious breathing, heart again occupying an abnormal position, quickened pulse, and heavy aspect of countenance, gave evidence of further mischief. These symptoms increased to the 6th day, when the trocar was again introduced, and between two and three pints of fluid were drawn off,—a small quantity, but with the same amount of relief as the larger quantity gave.

For some days the system seemed about to yield to the effects of the disease, but in the end he rallied, and is now occupied at his usual trade, suffering but from the inconvenience of shortness of breath upon extra exertion, which could only have been anticipated from the adhesions that must be the consequence of so much inflammation of a serous membrane.

I believe the statistics of paracentesis thoracis in this country show it to be an operation not very frequently per-

formed; from the circumstance, perhaps, that effectual means are taken in the early stages of pleuritis to subdue the inflammation; but the gratification derived from the change manifested in the patient immediately after the operation, would alone have compensated for the risk, without the almost remote hope of a successful issue to the case. The consequences of the operation were all here happily avoided; no amount of air entered the chest, there was no purulent formation, and no greater degree of constitutional disturbance than might have been expected.

Whittlesea, Cambridgeshire.

REMARKS ON AN IMPROVED METHOD OF SUPPORTING ARTIFICIAL TEETH.

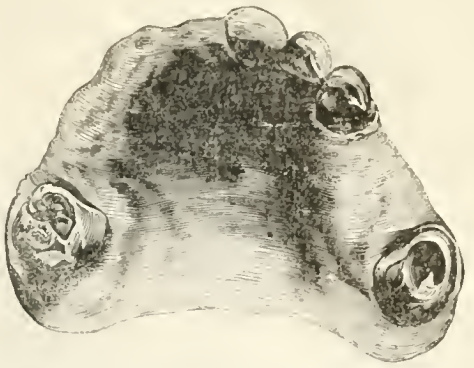
By C. STOKES, Esq., M.R.C.S.

The use of artificial teeth is, at the present time, so universal in every rank of life, and we may add, their utility is so indisputable, in heightening the charms of personal appearance, and in assisting to maintain the general health in a favourable condition, that every suggestion for their practical improvement is necessarily invested with considerable interest, and can hardly fail to engage the attention of every class of society, particularly that of the intelligent medical practitioner, to whose judgment and opinion in this special branch of practice reference is constantly made by the public. If in the use of artificial teeth there are admitted advantages, on the other hand, unfortunately, the benefit is materially lessened by the injurious action which these substitutes exercise on the natural teeth; especially when bands or clasps are used as the means of supporting them.

When we examine carefully the enamel of teeth on which bands have rested for any length of time, we find, in the greater number of cases, that its structure has undergone a considerable change; the carbonates and phosphates are decomposed, and partially dissolved, leaving the surface of the enamel porous, and of a chalky appearance; the dentine is, under these circumstances, soon affected, the tubes break down, and caries in its true form is established. The system of maintaining artificial teeth *in situ* by atmospheric pressure, is not open to this objection; and in cases where the gums and palate are favourably formed, is a successful method of supporting them without inconvenience, and with sufficient firmness to assist mastication very materially. The proximate cause of the loss of teeth under the circumstances already mentioned, is undoubtedly the lodgment, between the bands and teeth to which they are attached, of particles of food, which, in combination with the saliva, undergo chemical changes, whence an acid is generated. If we remove from the bands of artificial teeth, a portion of this pulpy mass, which is found, in greater or less quantities, lying between them and the necks of the teeth round which they pass, and apply it to litmus paper, the latter becomes instantly reddened. It is the perpetual contact of this acid matter with the teeth, that gradually but surely effects such changes in their structure as ultimately to involve their loss. The true character of this acid product is at present undetermined by chemists of great eminence;(a) a fact which is of minor importance, perhaps, compared with its destructive action on the teeth under circumstances favourable to its development. A question of greater value undoubtedly is, by what means can this evil be obviated? or, if not entirely obviated, at all events materially lessened.

I propose to lay before the Profession a system of mechanical aid in supporting artificial frames, which I have found practically to effect this object. A gentleman consulted me in the early part of the past year, in consequence of severe attacks of pain which he experienced in an upper molar tooth. He had worn, for nearly two years, artificial teeth, carved from the dentine of the hippopotamus, and adapted to fill certain spaces in the upper jaw, of which the diagram, *Fig.* 1, is an accurate representation.

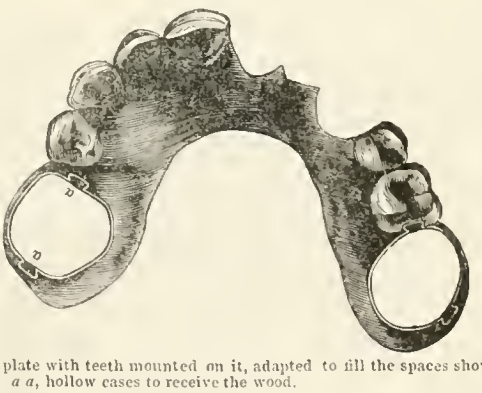
Fig. 1.



On examining the right molar, I found the neck extensively affected by caries, which was, in my opinion, the consequence of the re-action of the acidulated pulp to which I have already alluded. Some preliminary treatment enabled me to subdue the pain, and eventually to plug the tooth. As my patient felt assured that the continued operation of the original cause would again induce caries, either in that tooth or in the corresponding molar on the left side, both of which were employed to support the bone frame, he was very desirous of having such a system of artificial teeth adapted to his mouth as would avoid this contingency for the future. After some consideration, I devised a plan by which I felt assured that his wishes might be fulfilled, not only without injury to his remaining teeth, but with an increase of security, and also of utility.

I substituted a gold plate for the inconvenient mass of dentine which he had worn, and proposed to support the new frame and its accompanying teeth by means of elastic wood, enclosed in a flattened hollow case, accurately adjusted to the side of each molar tooth in the upper jaw, so as to secure contact at every point in a line drawn from the neck to the crown of the tooth; the position of these hollow cases on the plate is seen in *Fig.* 2.

Fig. 2.



Gold plate with teeth mounted on it, adapted to fill the spaces shown in *Fig.* 1. *a a*, hollow cases to receive the wood.

A sectional view of these cases, with the wood inserted, is given in *Fig.* 3.

Fig. 3.

a, *a*, Wood filling the hollow cases.

I inserted into these cases compressed hickory-wood, which, by increasing slightly in volume when moistened by the fluids of the mouth, pressed the sides of the molars with so much firmness and uniformity as to secure the accurate adaptation of the frame to the gums, with a completeness which satisfied every requirement. I have, since the period to which I have referred, applied the same principle in numerous cases of partially edentulous jaws, varying its application according to the particular character presented by each case; in all of which the result has been highly satisfactory. I have therefore no hesitation in recommending its adoption in every instance in which it is practicable, being very confident that

(a) "Various authors have assumed that lactates of the alkalies are present in normal saliva, and have referred the acid re-action which is occasionally noticed in that fluid to the presence of free lactic acid; but in the small amount of solid residue which is left by the saliva I have never been able to establish with certainty the presence of lactates, even when operating upon considerable quantities, obtained both from man and from the horse. I had, however, an opportunity of collecting large quantities of the saliva of a patient suffering under *diabetes mellitus*, and in this case I convinced myself beyond all doubt of the presence of free lactic acid."—*Vide Lehmann's Physiological Chemistry*, p. 94.

it combines security with great facility of removal and replacement; and, by preventing the lodgment of particles of food liable to undergo chemical changes, we necessarily remove an exciting cause, which, in many instances, involves the destruction of healthy teeth; in addition to which, we effectually banish from the mouth that unpleasant odour which so frequently accompanies the use of artificial teeth constructed in the ordinary manner.

Brook-street, Hanover-square.

CANULA-SCISSORS FOR THE EYE.

By WILLIAM BOWMAN, Esq., F.R.S.

Professor of Physiology in King's College, Fellow of the Royal College of Surgeons, &c.

In a recent paper on artificial pupil, I spoke of "the small scissors which M. Luer exhibited here last summer," but was not aware of what has just been pointed out to me by my friend, Mr. Wilde, of Dublin, that a similar instrument was described by him in your Journal of December 7, 1850, under the name of "a new scissors for the removal of opaque capsules and false membranes from the chambers of the eye." Mr. Wilde states there, that he took advantage of the principle of the very beautiful instrument lately invented by M. Charrière—viz., the canula-forceps, in which the blades are forceps-blades, and conceived the idea of making them scissor-blades, which idea the instrument-maker had carried out. For this idea, I think the Profession is much indebted to Mr. Wilde, and I hasten to say so. I should have been grieved if, through any inadvertence of mine, that eminent ophthalmic surgeon had been deprived of any share of the merit so justly due to him. He proposed the scissors for the division of fragments of opaque capsule, or false membrane, which so often elude the cutting needle; and also says, "Possibly this instrument, or some modification of it, may be useful in performing the operation for artificial pupil, or in detaching portions of the iris from the back of the cornea, &c. I have been induced by M. Charrière to give this early notice of the instrument, otherwise I should have waited until I had had practical experience of its value and working." Thus the merit of suggesting the possibility of the application of this instrument, or some modification of it, to the operation for artificial pupil belongs incontestably to Mr. Wilde.

Mr. Wilde says, "When introduced through the cornea, an opening should first be made for it with a flat needle or the point of an extraction knife." Hence, the canula-scissors he proposed were not self-penetrating, while those shown me by M. Luer are so; a great advantage. For it might prove difficult to introduce the scissors through a wound in the cornea, by which the aqueous humour might have previously escaped, and the iris been brought in contact with the cornea; whereas, when the scissors make the wound, and their canula fills it, the aqueous humour is retained while the blades are at work. I mention this, because it illustrates the steps by which inventions are perfected. Who made the scissors self-penetrating is of some consequence, as all merit should be acknowledged. Probably it may have been M. Charrière, perhaps M. Luer,—I do not know; but without this improvement I do not think the instrument would have been so serviceable as it is. My own further suggestions were, to have the blades even shorter than before, so as to work in the small space to which we are often limited, where an artificial pupil is to be made, and to have the shorter blade blunt-pointed, so that it could be pushed behind the iris without risk of wounding the lens. For these suggestions, I desire to claim no credit, as they naturally occurred to me when my mind was engaged on the subject.

I shall only add, that the object of my paper was to draw attention to the great importance of certain principles to be kept in view by surgeons about to operate for artificial pupil, and to show by examples how existing modes of operating might be advantageously modified. The question interesting to the Profession and to humanity, is, How can we most safely operate so as to form the most useful pupil?

5, Clifford-street, Bond-street.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

MIDDLESEX HOSPITAL.

By S. W. SIBLEY, Esq.,
One of the House Surgeons.

TETANUS.

Of an affection like tetanus, of whose pathology and treatment so little is understood, the record of every example must always be valuable, either as being an instance of the most ordinary course of symptoms and appearances after death, or as exhibiting aberration therefrom. As single examples, those of the latter class are especially valuable, for we often learn as much from the vagaries as from the ordinary behaviour of disease. It is under these considerations that we would offer the following case for perusal:—

Ellen C., aged 13, was admitted into the Hospital, October 31, 1851, under the care of Mr. De Morgan. The patient is an Irish girl, who has been working at Pinner, Middlesex; of fair complexion, and of moderately robust make. She had been attending to a thrashing machine, had been knocked down by one of the horses, and before the four horses that were turning the machine could be stopped, was struck several times by the poles of the machine; she was at once placed in a cart and brought to the hospital, a journey which occupied two hours. On her admission, the face and skin generally rather bloodless; the pulse, small, infrequent, and feeble. About half-way down on the anterior surface of the left leg, there is a laceration, exposing the tibia and muscles to the extent of about five inches by four, the skin for the most part torn away, with fragments still hanging round the edges of the wound. On the posterior surface of the thigh, on the same side, there is a deep laceration, the precise extent of which cannot be ascertained without disturbing her much. On the right leg and thigh there is considerable ecchymosis and distortion, with fracture of the femur about its middle, and the left foot is somewhat cooler than the right; there is also some slight ecchymosis, with grazing of the skin on the right side of the abdomen. She was placed in bed, the fractured thigh supported on pillows, wet lint over the wounds, an opiate with brandy administered, and hot bottles to the feet. A few hours afterwards she passed a healthy motion, without any water, and, in the evening, the pulse got up to 120; skin warm; complains of pain in the left leg. Twelve hours after admission, pulse 146, small, quick, and feeble; skin heated and moist. She complains of great pain about the abdomen and thighs. About twelve ounces of clear urine drawn off by the catheter. The opiate continued every three hours.

The next day, Oct. 22.—Has passed a restless night. Countenance flushed; skin warm; pulse 140, rather more expanded. Tongue whitish, rather dry. Wounds pale; considerable effusion into the right knee-joint. Has passed no motion. Urine drawn off. There is great tenderness to the left of the umbilicus. The opiate continued.

Oct. 24.—Much the same. Tongue whitish, moist; pulse 116, fuller, soft. Urine passed during sleep this morning; no further action of the bowels. Complains of great pain in the feet. The opiate to be given three times a day; to have some beef-tea every two or three hours.

Oct. 25.—Had but little sleep, and wandered somewhat during the night. Countenance not so much flushed; skin heated, moist; tongue moist, white; pulse 120, fuller. Urine passed freely; bowels not open since the 21st, no purgative having been administered, because some injury to the abdominal viscera was suspected from the distention and tenderness in the abdomen. The wounds are now discharging tolerably healthy pus, the edges looking dusky. Has great pain in the legs. The right thigh remains supported on pillows; the wounds ordered to be dressed with balsam of Peru. The beef-tea continued with the opiate occasionally. To have a dose of scammony and calomel, with an oily injection to morrow morning.

Oct. 26.—Had an offensive, dark-coloured motion this morning, the first since the 21st; otherwise as yesterday.

Oct. 27.—Tongue with a slight brown fur; bowels open freely; wounds healthy, with a copious discharge; countenance natural, has a desire for food. Complains of pain only in the feet.

Oct. 28, the eighth day after the accident.—Countenance natural; tongue with a slight brown fur; pulse 116, soft, rather small. Urine clear, passed regularly. Has had some pain in the feet, and in the wound in the left leg. Complains of "some soreness" about the throat; there is some redness of the mucous membrane. Ordered a mutton chop; the opiate and powder of scammony and calomel. At 10 p.m., the soreness in the throat increased

so that she swallows only with great difficulty, the act being performed with a gasping effort. Can only open her mouth about half an inch wide. There is some hardness of the muscles at the back of the neck and of the masseter. At 11 p.m., there was an attack of spasm of the muscles at the back of the neck, which lasted but a few moments.

Oct. 29th.—Countenance anxious; respiration tranquil. There has been some twitching of the arms this morning; jaw clenched; the teeth can only be separated about a quarter of an inch. Pulse 120, as yesterday; skin moist, perspiring; bowels open freely, with a dark bilious motion; denies any epigastric or præcordial pain or uneasiness. Tincture of aconite ordered every four hours. 11 p.m., five hours ago, was suddenly attacked with opisthotonos; the muscles of the back rigid; respiration stridulous, accompanied by great pain. The fit lasted but a few seconds, and left her complaining of a choking sensation in the throat. Since this she has had four similar fits, the last the strongest, two hours since. *Risus sardonicus* marked. Bowels open twice. Several sloughs have separated from the wounds.

Oct. 30th.—Has had no decided fit since 9 p.m. last evening, though there is constant twitching of the head backwards. Slept part of the night, the rigidity of the muscles continuing during sleep. The pain caused by the twitching is relieved by pressure on the back of the head. She lies with the body half out of bed, her head supported by a nurse. Jaws almost closed. Complains of intense thirst. Is still able to swallow medicine and wine, but with great difficulty, and only in small quantities. Respiration quick, short; skin perspiring; pulse 140, very feeble; bowels not open; urine passed involuntarily. The wounds are looking more dusky, though a great many deep sloughs have separated. Ordered morphiæ acetatis, gr. ½; aquæ dest., ʒij. omni horâ. 11 p.m.—The twitching of the head continues as before. Respiration 44, short, with some rattling in the air-tubes. Pulse 150, scarcely perceptible. Is perfectly clear in her answers. Complains still of thirst, but is quite unable to swallow. On being questioned, refers the uneasiness to the site of the ensiform cartilage. Ordered, enema tobac. The difficulty of respiration increased till she died, 1 a.m., Oct. 31st, remaining perfectly clear in her intellect to the last.

The examination of the body was made eleven hours after death. The weather cool. Cadaveric rigidity tolerably strong in the arms and legs; muscles of the back of the neck quite lax; jaws closed, but not so rigidly as during life; some discoloration about the posterior part of the body. On cutting into the muscles of the back a number of small patches of ecchymosis are seen. On opening the canal, all the veins are observed full of blood. Opening the sheath, there is about the usual quantity of fluid, some slight adhesions of the arachnoid in the cervical region; veins on the surface of the cord gorged with blood; the consistence and colour of the cord quite healthy. In the head very slight congestion of the vessels; tissue of the brain healthy. The right thighbone is fractured across about its middle, a longitudinal fracture splitting the upper half into two; a large bag of blood surrounds the fracture, with great ecchymosis among the surrounding muscles. In the sciatic nerve of the left side, nearly beneath the external wound there is a small ecchymosed spot, about one-eighth of an inch in diameter, which may be shown to be within the neurilemma. There is another similar spot on the external popliteal nerve. In the right leg the nerves are quite healthy.

With reference to the importance of what has been noticed on nerves in various cases of tetanus, we need only cite the words of Rokitansky:—"However insignificant and unsatisfactory it may seem, when brought into connexion with the symptoms during life, yet it is the only real fact that has been made out in such cases after death." We would therefore direct especial attention to what has been noticed in the wounded limb. Now, Froriep, who has described appearances on the nerves as local inflammation, and lays this down as the proximate cause of the affection,—whether it be possible that a local inflammation can be the cause of the disease, we need not here consider; but the time at which the symptoms, or even death has come on in certain cases, renders this highly improbable. Moreover, the changes which took place in the patches of ecchymosis in the nerves, are well worthy of attention; the next day, that is to say, thirty hours after death, the defined margin had ceased to exist; there was situated, on an apparently healthy nerve, a small rosy spot, the colour being brightest at the centre, and fading off towards the circumference, extending to some depth in the nerve, the total length of the discoloured part being about half an inch. Here then we have nearly the same appearance as that which has been described by Froriep and others; but in this instance there could be no inflammation, as the appearance was produced after death, and by the fact, that under the microscope nothing but the ordinary constituents of nerves with a great many blood corpuscles, was discovered. May we not, therefore, venture to propose, that it is possible that the appearances described in various cases of tetanus may have originated in such ecchymosed spots we have spoken of, and that the length of time after death at which the body has been examined, or the state of the weather, may have permitted the changes we have noticed as taking place without the body, to have been accomplished within it, and that it may therefore occur as a common anatomical character of tetanus.

On regarding the nature of the symptoms in this case, there is one fact singularly striking, namely, the almost entire absence of pain or uneasiness about the ensiform cartilage; for it is seen that no complaint or acknowledgment of this occurred till a few hours before death, and then did not present itself by any means as a prominent symptom. Nor where there any other indications to make us suppose there was much affection of the diaphragm. Why in this particular instance a symptom so uniformly present should be nearly absent, we need not here inquire. Then again it is curious to observe in this case, that after violent fits of opisthotonos had occurred six times, there should be a complete disappearance of them, leaving the muscles of the back firmly contracted, the head subject to occasional twitches backwards, this condition continuing till death. And death itself did not take place in either of the two common ways, viz., by a continuance of the violent spasms inducing asthænia, or by the involvment of the respiratory muscles causing asphyxia; but, notwithstanding this, death, after the disease had once set in, was extremely rapid.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Jan. 31.—Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

——— ——— Medical Society of London. *Subject:*—Mr. Henry Bullock, "On Injuries of the Spine, and their Relation to the Urinary Organs." Eight o'Clock.

Monday, February 2.—Epidemiological Society. *Subject:* — Dr. Bryson, "On Epidemic Dysentery in China." Half-past Eight o'Clock.

——— ——— Chemical Society. Eight o'Clock.

——— ——— Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock

Tuesday, February 3.—Pathological Society of London. Eight o'Clock.

——— ——— Royal Institution. *Subject:*—Professor T. W. Jones, "On Animal Physiology." Three o'Clock

Wednesday, February 4.—Geological Society. *Subjects:* — 1 D. Sharpe, Esq., F.G.S., "On the Southern Border of the Highlands." 2. Sir R. I. Murchison, F.G.S., "On the Predicted Discovery of Gold in Australia." 3. Rev. W. B. Clarke, F.G.S., "On the Discovery of Gold Alluvia in Australia." Half-past Eight o'Clock.

——— ——— Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.

Thursday, February 5.—Harveian Society. Eight o'Clock.

——— ——— Royal Institution. *Subject:*—Rev. J. Barlow, M.A., Sec. R.I., "On the Physical Principles of the Steam-Engine." Three o'Clock.

Friday, February 6.—Western Medical and Surgical Society of London. *Subject:*—W. M. Chatterley, Esq., "Notes of Some Interesting Cases in Obstetric Practice." Eight o'Clock.

——— ——— Royal Institution. *Subject:*—Mr. Scott Russell, "On Wave-line Yachts and Ships." Half-past Eight o'Clock.

Saturday, February 7.—Medical Society of London. *Subject:*—Dr. Forbes Winslow, "On Idiocy and its Treatment." Eight o'Clock.

——— ——— Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Medical Charities.—The following princely donations have been bequeathed to the undermentioned medical institutions by the late Mr. Thomas Dickinson, of Upper Holloway. The Idiot Asylum, 2000*l.*; the London Hospital, 1000*l.*; the Royal Free Hospital, 1000*l.*; the Charing Cross Hospital, 1000*l.*; the Fistula Infirmary, 1000*l.*; and the Holloway Dispensary, 500*l.* In addition to the above munificent sums to medical charities, this gentleman has left similar large amounts to various non-medical institutions.

Medical Times & Gazette.

SATURDAY, JANUARY 31.

THE PROPOSED REFORM BILL.

The Council of the Provincial Medical and Surgical Association, undeterred by the apparent hopelessness of a successful issue, have ventured to prepare another Medical Reform Bill. Last week we laid an analysis of that Bill before the Profession. Considered in the abstract, the scheme of the Council of the Association is a good one. It provides that every medical practitioner shall undergo the same examination, and that he shall subsequently be qualified legally to practise any and every branch of his profession, under the title of Licentiate of Medicine, Surgery, and Midwifery; that, if he desire to assume the name or style of a Physician, he must obtain the licence of the Royal College of Physicians, and that, if he desire to be dignified with the name of Surgeon, he must obtain the diploma of the Royal College of Surgeons. The State is to have satisfactory evidence that every man who practises medicine is qualified; but once having such proof, it is to recognise the individual as qualified to practise all branches of medicine, and in all and every part of the three kingdoms. Those, however, who join and submit to the by-laws of the Royal Colleges of Physicians and Surgeons are to have secured to them a distinctive appellation, which it will be illegal for others to assume. This we firmly believe is the basis on which any efficient Medical Reform Bill must be founded. One portal to the Profession, but not a single Faculty,—a common basis of professional knowledge, but not one rank,—a provision for ensuring the complete education of the ordinary attendants of the people, and at the same time for the conferment of a distinctive title on those who devote themselves to a single department of the science of medicine, —one qualification enforced by the State, one title, one privilege granted by the State, to all who show themselves possessed of that qualification,—higher titles for all who voluntarily submit to more lengthened study or more stringent examinations. This much is essential for the public weal and the welfare of the Profession. It is not provided by the existing corporate bodies; and hence the necessity for an alteration in the laws regulating the Medical Profession. We repeat, then, considered with reference to its fundamental principles, the Draft Bill put forward in the name and by the authority of the Council of the Provincial Medical and Surgical Association is a good one; and it has this advantage over previous Bills, that its working appears to be compatible with the interests of the existing Colleges.

The dignity and influence of the Royal College of Physicians would under its action be greatly augmented. For to its care, jointly with the other corporate bodies, the superintendence of the examination and registration of all the practitioners of England would be confided. True, the College would lose the privilege it now possesses of granting a licence to practise as a physician in London to those who conform to its regulations. All it would have the power to bestow would be the privilege of using a name; but then this privilege would be one of far greater worth than that it now possesses, as, without its licence, no man could hereafter be called physician to any institution in England. By the proposed Bill, also, the revenues of the College would be vastly increased,—its exchequer would soon be in a flourishing condition. The cash receipts, too, of the Royal College of Surgeons would, we believe, if this Bill became law, be undiminished. For, at the present time, any man may assume the name of Surgeon, and every man who has the licence of the Worshipful Society of Apothecaries, does so call himself, without reference to the powers in Lincoln's-inn-fields. Custom renders it necessary for every one practising as a general practitioner in England to bear the name of Surgeon; and as no man could, under the proposed Act, so style himself who had not the diploma of the College, not only would all that class who now join the College continue to do so, but all those also who now refuse to pay the College 22*l.* for a name they may use without its permission.

The Worshipful Society of Apothecaries have often expressed its willingness to give up the powers it now possesses, if satisfied that they would be conferred on a body which could exercise them more advantageously for the Profession. There cannot be a doubt, that the proposed Medical Council for England would be such a body; its status would command respect, it would be hampered with no apprenticeship clause, and men of science could be appointed by it to discharge the duties of Examiners.

We cannot, then, anticipate any insuperable opposition to the new Bill from either of the Royal Colleges in England, or from the Worshipful Society of Apothecaries. The Universities of Oxford and Cambridge would lose the privilege of giving a licence to practise in the provinces, but, in lieu of that, their Regius Professor of Physic would have a seat in the Medical Council. The Bill is not, we have said, perfect. We should like to see the Medical Council elected directly by the votes of every licensed member of the Profession; but we believe a scheme having so broad a representative basis could not be carried against the opposition that would be offered to it. Considering, then, the disposition of the Colleges, and of a large section of the Profession, we believe the proposed Bill to be as liberal as possible. Do we think, then, that this Bill will become law? Do we think that a Bill has at length been framed, by which the interests of the public, the Profession, and the existing corporate bodies will one and all be advanced? If England alone were concerned, we should say Yes. But Scotland and Ireland have to enter into our calculations, and experience has shown that the authorities of Universities and Colleges in Edinburgh and Dublin offer the serious difficulties to the enforcing of uniformity of qualification and *title* in the three Kingdoms.

There must be no repetition of the tenth clause of the Bill brought forward by the *Institute*. Scotch and Irish University degrees must be like the degrees conferred by the University of London, only honorary; they must not be held to be licences to practise.

If the Council of the Provincial Association can fill up Clauses 5, 6, 7, and 8 of their Bill, now blank, so as to ensure for the three kingdoms one curriculum; examinations, so far as may be the same in severity; identity of titles, and equality of privileges; and obtain the consent to those and other clauses of their Bill of the Scotch and Irish Universities and Colleges, we should then really hope to see the Medical Profession placed, politically and scientifically, on a better basis.

If successful in carrying a good and practicable Bill, the Council of the Provincial Association will indeed have earned for themselves the gratitude, not only of the Profession but of the country.

On the present occasion it is unnecessary for us to advert

to some of the minor details of the Bill, *e. g.*, the sum to be paid on taking out certificates, and the propriety of renewing those certificates every year. Of the great advantage that would accrue to the Profession from the formation of a Benevolent Fund, there cannot be two opinions.

OUR RELATIONS WITH THE HOMŒOPATHS.

If our last Article succeeded in proving that, between the Practitioners of Medicine and the Homœopaths there could be no alliance, it seems almost superfluous to discuss the question which we propose to consider in our leader of to-day.

Is a homœopath entitled to remain a professor in any of our Universities, and to take part in the education of our future physicians? We venture unhesitatingly to affirm, that, were such a question put to any honest man not prejudiced in favour of homœopathy, his reply would be in the negative; and, if there was doubt or hesitation on the subject, we think the two pamphlets which have been published in defence of Dr. Henderson's position most conclusive evidence against him. If Dr. Henderson considers his own position a right and proper one, we think he would have added greatly to his dignity by voluntarily resigning the chair, leaving it to the patrons to re-elect him, should they think a homœopathic professor likely to be an ornament to the University. But however injurious to the interests and reputation of the University of Edinburgh, the occupancy of one of its chairs by a homœopath may be considered, we are decidedly of opinion that the position of Dr. Henderson is something a great deal worse. He is a homœopath only when it suits his purpose, and can practise the ordinary method when any advantage is to be gained thereby. Mark his own avowal of this. "I rejoice to say, that I know many physicians who, while they adhere to the homœopathic law as the great regulator of their practice, consider themselves entitled, in the free exercise of their profession as independent men, to prescribe any quantity of medicine they think necessary for their patients; and where the homœopathic principle cannot be of service to them, whether from its own present or necessary limitations or their insufficient acquaintance with it, consider themselves not only at liberty, but bound in duty to employ any other expedients for the benefit of their employers that may be within their knowledge." Is this honest, or is it not? Did we give our own opinion we might be accused of prejudice,—let us, then, quote from Hahnemann:—

"They know," says he, speaking of practitioners whom he denominates the 'mongrel sect,' "from frequent practice, how to make up for inefficiency of the scarcely half homœopathic remedies by the employment of homœopathic means that come much more handy to them, among which one or more dozens of leeches applied to the affected part, or little harmless venesections to the extent of eight ounces and so forth, act an important figure; and should the patient, in spite of all this, recover, they extol their venesections, leeches, etc., alleging, that had it not been for these the patient would not have been brought through; and they give us to understand in no doubtful language, that these operations derived, without much exercise of genius, from the pernicious routine of the old school, in reality contributed the best share towards the cure; but, if the patient die under the treatment, as not unfrequently happens, they seek to console the friends, by saying, that everything conceivable had been done for the lamented deceased."

Or would our readers prefer the opinion of a British homœopath: let us hear Dr. Black on the subject:—

"There is," says that gentleman, "a class of practitioners who merit the indignation of every right-minded man,—a class, who viewing medicine only as a trade, a mere barter for pounds, shillings, pence, act obsequiously as the patient wishes; at his desire their practice is either homœopathic or allopathic. Such unprincipled procedure admits of no apology."—*Principles of Homœopathy*, p. 163.

But, it appears, that the same moral perversity which has placed Dr. Henderson in the class whose "unprincipled procedure" has called forth this stern denunciation, pervades his entire character. Strange to say, his letter to the "Patrons" contains no high-minded declaration of principle, no honestly conceived and deliberately announced determination to brave all dangers in the maintenance of his new belief; on the contrary, by a series of contemptible subterfuges, he attempts to show that he can discharge his duties as a Professor separate and apart altogether from his beliefs as a homœopath. We will not condescend to enter the lists with him on this narrow and restricted ground. We will not follow him through his subterfuges and strategies. We can afford to believe, that his zeal for homœopathy is so small, or his love for the emoluments of a chair so great, that he can smother his convictions, and see around him his students embracing and being instructed in error, without the slightest forth-putting of influence on his part to save them. Some minds could occupy so delicate a position, without breaking through its sinuosities into a straighter path; but no man could do it without being the worse of the effort. Dr. Henderson is Professor of Pathology,—a science embracing the whole range of Medicine, and requiring him to give general views of each branch of the healing art, including the application of remedies to the cure of disease. Dr. Henderson knows that this branch is included in every complete work on general pathology, and yet this department is omitted from his course, while he informs the Patrons, "My commission from the Patrons does not require me to lecture on the principles of therapeutics." But even restricting general pathology to the very limited field which Professor Henderson thus assigns to it, we assert, that if he teaches the commonly received doctrines of Pathology, he teaches that which Hahnemann affected to ridicule and despise; and that, if he teaches the pathological doctrines contained in Hahnemann's Organon, he places before his students a farrago of nonsense, which would change even their passive receptivity into an outbreak of justifiable indignation. Does he believe and teach, with Hahnemann, that "itch is the mother of all true chronic diseases except the syphilitic and sycotic"? Does he believe and teach the peculiar physiological notions of the same author? Or how does he manage in regard to animal magnetism? He is pleased to sneer at its "spiritual wonders," and at the belief of them by his colleague in the Chemical chair; and yet his venerated master, Hahnemann, speaks of it as a "curative power, often stupidly denied, which streams upon a patient by the contact of a well-intentioned person." Hahnemann believes in the operation of mesmerism as strongly as in that of any of his other remedial agents. Hahnemann founds his belief in its operations on evidence similar to that which gives him confidence in the others. If the evidence for the one class be conclusive, that of the other must be conclusive also. If Dr. Henderson sneers at the one, why may we not sneer at the other? Strange that the evidence which he thinks ought to convince others, has not yet removed all doubt from his own mind.

But it is on grounds apart, and altogether above any which we have yet considered, that we think it damaging to the reputation of the University of Edinburgh, that a Homœopathic Professor should occupy one of its chairs. It is not enough that a Professor be a good teacher; he should also have a philosophic mind. We are by no means singular in holding the opinion,

that the Profession of a belief in homœopathy, is an evident proof of the absence of such a character. There is one man whose scientific reputation gives a value to his opinion which it would not be easy to estimate; and we observe with satisfaction that he is quoted by Professor Henderson with approbation. We allude to the illustrious Liebig. His opinions on homœopathy could have received no bias from any supposed professional jealousy; and we ask our readers to mark how he characterises men who affect to be jealous of their reputation as scientific physicians, and even aspire to be professors of medical science.

"Can we wonder," he says, "that men wholly ignorant of physiology and chemistry, although in other respects rational, should adopt the absurd notions of Hahnemann,—that his doctrines should prevail in Germany, and find disciples in all countries? Reason alone will not prevent whole nations from falling into the most abject superstitions; whilst even a child whose mind has been duly developed and instructed will repudiate the fear of ghosts and hobgoblins. Can men who are totally incapable of comprehending the nature of philosophical investigation,—who altogether miss its true spirit in their attempts to learn,—who cannot, therefore, read the language of phenomena themselves: can such men be expected to derive the least advantage from the discoveries of chemistry or physiology, and can they be deemed capable of making the most insignificant application to practical purposes of those discoveries?"

Such is the estimate entertained by Liebig of the mental capacity of those who embrace homœopathy; and such, we may add, is the general opinion of all scientific men. Those medical bodies who possess the power, have publicly expelled them; and those whom legal forms deprive of it, have entreated that they would voluntarily retire; and yet, in the face of such a requisition, and notwithstanding the contempt and scarcely concealed disgust of those whom he professes to instruct, Professor Henderson persists in maintaining his equivocal position. Nor is he altogether insensible to shame. He tells us, that he has withdrawn from the society of his brethren, because he is an object of suspicion and dislike. Well were it for the University of Edinburgh if the same motive forbade his appearing in the class-room, or mingling with the students. He professes his ability to discharge every duty of a professor, apart altogether from his homœopathic beliefs; but his own pamphlet shows that this can only be done by a *suppressio veri* on his part. Statistics, proverbially deceptive, may be arrayed to prove that the University of Edinburgh has not suffered by his conduct; and it may be true that the fame of some of his colleagues may have bolstered up its sinking reputation. We can point, however, to those who would have crossed the Tweed and studied in those halls, once adorned with the genius of a Cullen and a Black; but the incubus under which this school now lies more than outweighs its former *prestige;* and it would be little consolation to those who may hereafter weep over its ruins, to settle whether the homœopaths or the mesmerists have done most to tarnish its ancient glory. The Chair of Pathology in that University is the only one in the United Kingdom where that branch is taught. Hence, students desirous of graduating at Edinburgh must attend it there, or seek the necessary certificate abroad. It consists with our knowledge, that many have chosen the latter course, and that others, though desirous of possessing the Edinburgh degree, have graduated elsewhere, rather than be compelled to listen to the prelections of one whom they believe to be equally devoid of sound judgment and scientific character.

How the Professors at Edinburgh writhe under the infliction of having such a colleague, let the memorable protest of Professor Syme declare. But, as a letter of our Scottish Correspondent, (page 21,) shows, they have virtually the decision of the matter in their own hands. The contest is one between the interests of science, of the student, and of the character of the University, on the one hand; and the paltry jealousy and illiberality on the other,—the weaker party must go to the wall.

Let the Edinburgh Professors know, that they are watched with Argus eyes; now is the time for action. Six months hence, if they delay, they will assuredly be driven into the position which they now seek to avoid.

Let them obey the decision of the Court of Session. Let them not postpone the ultimate settlement of the question by appeals, real or pretended. Let them throw open the classes to the extent of one-fourth, permitting their intending graduates to take them at any accredited school.

Then will the follies of Homœopathy and the dreams of Clairvoyance fall alike harmlessly. The student will himself refuse to listen; empty benches may compel a retirement which higher considerations could not effect, or their impressive appearance convince even a reluctant Common Council, that to be a Homœopath carries with it such a manifest absurdity as to unfit a man for undertaking a single duty which brings him into contact with science, or requires in him the exercise of common sense. Let a timely compliance with regulations, which have been all but unanimously approved by the whole Profession, be given. Let the bonds which now fetter the student be struck off, and it requires no gift of prophecy to predict, that Henderson, the Homœopathist, will immediately retain but the empty title of an extinct professorship.

THE COLLEGE CHARTER.

The following Petition has been forwarded to the Government by the surgeons of the Isle of Man:—

"Showeth,—That at the present crisis, when a new Draft Charter in favour of the Royal College of Surgeons of England has been laid before the Profession, in order that its voice might be heard in relation to the same, prior to its official issue, your Memorialists anxiously avail themselves of the opportunity thus courteously afforded them to state their views on the document in question.

"That, after having considered the full scope and bearing of the said new Charter in all its details, they are unanimous in their appreciation of the greater part of its provisions, in which they gladly recognise a returning disposition on the part of the Council to exercise justice towards the great body of the Profession, and, by an extension of the Fellowship, to elevate the status of British surgeons—a desideratum which has been but too long experienced.

"That the permission granted to provincial Fellows to supply their respective patients with necessary medicines, (should they think it imperative on them in certain localities to do so,) is regarded by your Memorialists as a judicious concession on the part of the College, provided only that it be distinctly limited to the gratuitous dispensing of such drugs, no charge being allowed to be preferred or accepted by the said Fellows in general practice for the same, otherwise your Memorialists are strongly and unanimously of opinion that the dignity of the Fellowship would be thoroughly compromised thereby.

"That your Memorialists hail with peculiar delight the provision of the new Charter, by which surgeons of other Colleges are rendered admissible to the Royal College of Surgeons of England, without examination, on payment of certain equitable fees, since it involves the expression of a principle, the due exercise of which will materially contribute to the removal of professional animosities, the more to be deplored because they are not unfounded.

"That the clause establishing examinations in obstetric surgery by the College is also very gratifying to your Memorialists, and worthy of commendation, since obstetricy constitutes an obvious and most important branch of general surgery.

"That notwithstanding such general approval of the said

Charter as at present drafted, yet it is the conviction of your Memorialists, that, in order to its extensive acceptance by the Profession, it ought of necessity to be amended, at least to the extent of the three following points, without which, in the humble opinion of your Memorialists, the scope of the new Charter will be by no means so comprehensive and elevating in its tendencies as the surgical body of these realms have a right to anticipate, viz.:—

"I. *That provincial Fellows be enabled to exercise the franchise of the College without restriction, by means of voting papers duly issued by the College, the personal attendance in London of such Fellows, for such purpose, being thus superseded.*

"II. *That the 3000 gentlemen who have become members of the College since 1843 be freely admitted to the fellowship on the same terms as their more fortunate brethren of a prior date, namely, on a fifteen years' qualification.*

"III. *That the membership hitherto existing in the College be at once abolished, and that a doctorate in surgery be forthwith instituted in lieu thereof; all existing members being at once constituted by Charter, doctors of surgery.*

"That, while your Memorialists respectfully, but energetically, press upon your favourable consideration the absolute necessity there exists for incorporating the above recited provisions in the amended Charter of the Royal College of Surgeons of England, they do further deem it advisable to sustain their advocacy of the third provision by the following cogent reasons—the imperative necessity of such provision forming a feature in the forthcoming Charter being thus more indisputably established, viz.:—

"1. *Because*, in professional science, the surgeon and the physician are compeers; 'all surgeons being,' according to the definition of Sir Astley Cooper, in 1834, 'physician-surgeons, and all physicians, conversely, surgeon-physicians;' the science of medicine, operative and pharmaceutic, being absolutely 'one and indivisible;' whence it results that the surgeon has an equal, incontestable right to the collegiate designation of doctor.

"2. *Because* the wide domain of surgery includes 'all those cases of functional derangement, and of structural disease, and of solution of continuity of normal tissues from mechanical or chemical causes occurring in the human frame, in which surgical instruments are used as diagnostic, prognostic, or therapeutic agents,' and therefore embraces the great majority of therapeutical practice throughout the world; from which it is evident, both on scientific and practical grounds, that surgery has, equally with physic, an indisputable claim to the possession of a doctorate.

"3. *Because* a Doctorate in Surgery would more gracefully consort with the recently created Fellowship than the anomalous membership at present existing.

"4. *Because* a doctorate is essential to restore surgery in the British Isles to its legitimate position and rank, while it can only issue appropriately from the three great surgical corporations of the United Kingdom.

"5. *Because*, hitherto, the degree of Master of Surgery conferred by the University of Glasgow has been the only one connected with the profession of surgery in these realms.

"6. *Because* a bachelorate and doctorate are attached to the profession of surgery in France, where that science is justly held to be equal in all respects with the profession of physic, the curriculum of education in either branch of the therapeutic art being similar, viz., four inscriptions and a preliminary degree in letters.

"7. *Because* the desired substitution of a doctorate for the mere membership in surgery, would inevitably secure to the Profession a much larger accession of graduates in letters than at present adorns its ranks,—men whose extended intellectual training in science and logic would necessarily render them closer observers, more accurate reasoners, and, therefore, abler surgeons than those whose academic culture has been restricted; and thus the boon here contended for by your Memorialists would not only reflect honour upon yourself as a statesman, but would certainly eventuate in vast and positive good to the British public.

"8. *Because* it is understood that the University of Dublin, influenced by a laudable zeal for the promotion of science, has lately determined to grant degrees in surgery as well as in physic, so that the surgical science of Ireland, which already stands forth before the world in such brilliant efficiency, will unquestionably receive a still further impulse by a concession at once so equitable and so judicious.

"That, in conclusion, your Memorialists, entirely confiding in your acknowledged ability and discretion, and reposing in the justice of their requisitions herein set forth, do venture to express a confident hope that the amended new Charter of the Royal College of Surgeons of England will eventually prove culminative of the high and long-cherished anticipations of their order—anticipations at the same time so happily concurrent with the public welfare and the common cause of humanity throughout the world.

(Signed) "Robert E. Craine, M.R.C.S.E.
Samuel C. Nelson, M.R.C.S.E.
H. H. Montford, M.R.C.S.E.
Thomas M. Teare, M.R.C.S. Edin.
Thomas Christian. M.R.C.S.E.
John F. Crellin, M.R.C.S.E.
H. L. Stewart, M.R.C.S.E. (1820.)
John Berkeley Harrison, M.R.C.S., Edin.
George S. C. Butler, M.R.C.S.E. (M.D.)

"Isle of Man, December 19, 1851."

REVIEWS.

1. *On the Classification and Management of Criminal Lunatics.* By J. C. Bucknill, M.B. Lond, Superintendent of the Devon County Lunatic Asylum. London: Churchill. Pp. 58.
2. *Remarks on the Plea of Insanity, and on the Management of Criminal Lunatics.* By William Wood, M.D., Licentiate of the Royal College of Physicians, and Medical Officer of Bethlem Hospital. London: Longman. Pp. 70.

These are two very important pamphlets on a subject which will probably attract some attention in the next Session of Parliament. Two very great defects in the construction and administration of the law in the case of persons who have committed crimes under the influence of insanity have long attracted attention. In the first place, the law under which a plea of insanity is set up for a prisoner accused of a criminal offence, is unusually ill-defined, and the degree of insanity, using the word in its widest sense, which is held to justify such a plea, is fixed by the arbitrary dictum of the presiding judge, or by the hap-hazard conclusions of a jury, and is not based on any regular and admitted premises. Secondly, when the law has decided that a criminal is lunatic, and therefore not legally guilty, but yet dangerous to society, it provides no proper asylum for him, but sends him either to Bethlem or to some one of the County Asylums which may be near the place of his conviction. At Bethlem a special ward is provided for "criminal lunatics," but in the County Asylums they are necessarily mixed up with the other patients. On the 1st of January, 1850, there were more than 100 such patients in Bethlem, and 264 in other asylums. The criminal lunatics consist, again, of two classes,—of offenders who have committed the crime under the influence of insanity, and of convicts who have become insane after conviction, and during their confinement in the ordinary prisons. The classification and proper separation from each other, and from other insane patients, of "criminal lunatics," are, therefore, extremely imperfect, and, with the exception of the partial attempt at Bethlem, may be said to be not attempted at all.

Such, stated in their simplest form, are the questions to which the two writers above quoted address themselves, with greater or less amplitude of illustration and argument. As their pamphlets are perused, the importance and extent of the subject grow upon us; and, if the formation of a State Asylum for criminal lunatics is a comparatively simple question, the present condition and future alteration of the law as it affects this class of criminals is an extremely knotty point, and one which, it may be, is incapable of satisfactory decision.

"The law," says Dr. Bucknill, "declares all offenders responsible for their acts, and liable to punishment, except they are insane in a manner and degree which it attempts briefly to define; a plan as reasonable as it would be to declare diseased persons free from civil duties, and to lay down in a legal axiom of three lines what is the nature, character, and extent of all possible bodily disease. This attempt to define insanity in a concise form with a sharp line, as they would declare a man to be young under twenty years and of age when above it, is the great error into which lawyers have fallen. Even the platitude of Polonius is better:—

> "Mad call I it: for to define true madness
> What is't but to be nothing else but mad."—P. 28.

Whether an asserted lunatic is responsible, and to what extent, is a point infinitely perplexing to all concerned, judges, juries, and medical witnesses. The last, between their extended and philosophical notions of insanity, and the legal hedging of the judge,

generally go to the wall, and occasionally get snubbed for their opinions; but when the Judges are put to it, they differ among themselves as much as they differ from the doctors. Lord Campbell, after examining into all the cases since 1723, declared in the House of Lords, that in the directions of the Judges "there was a wide difference both in meaning and in words in their description of the law."—("Bucknill," p. 29.) And Dr. Wood makes a careful comparison of some late cases to show "how contradictory are the opinions held by different judges as to the propriety of controlling insane persons."—P. 32.

The opinions formally given by the Judges in the House of Lords after the trial of M'Naghten, in 1843, viz., that an offender, even when under an insane delusion, is still punishable, if he knew at the time he was acting illegally, has been found to be quite inapplicable, and has been totally abandoned in some late cases, as in that of Frost, a Wesleyan preacher, who murdered his four children in a decided fit of insanity; and yet, knowing that he had rendered himself liable to the law, made some attempt at concealment. In this case the above-quoted dictum of the Judges, if strictly acted upon, would have hanged the unfortunate lunatic.

Dr. Wood cites a very remarkable case of this kind, which is so apposite, that we quote it in full. Some years ago a man named Dodd murdered his father. He thus described to Dr. Wood the motives which impelled him to the parricide:—

"On my return from travel," wrote Dodd to Dr. Wood, "I was roused to a consideration of subjects which I had previously never dreamed of or thought about, connected with self; and I had such ideas, that, had I spoken of them openly, I must, if answered in the world's fashion, have been told I was unreasonable. I concealed, of course, these secret admonitions. I knew not whence they came, although I could not question their propriety, nor could I separate myself from what appeared my fate. My religious opinions varied, and do vary from the vulgar. I was inclined to fall in with the views of the ancients, and to regard the substitution of modern ideas thereon as not for the better. These and the like, coupled with the idea of a descent from the Egyptian God Osiris, induced me to put an end to the existence of him whom I had always regarded as a parent, but who, the secret admonishings I had counselled me, was the author of the ruin of my race. I inveigled him, by false pretences, into Cobham Park, and slew him with a knife, with which I stabbed him, after having vainly endeavoured to cut his throat. Now, the author of this act is unknown to me, although, as being the cat's-paw, I am held responsible."—Wood, p. 42.

Now, this poor madman, although madder he could not be, had yet so well foreseen the legal consequences of his act, that he had previously procured a passport, and immediately after the committal of the act escaped to France.

If, then, this attempted definition of irresponsible insanity altogether breaks down, at what point does insanity begin, and when does it excuse a man from the legal, as well as from the moral guilt of his actions? On this point there is no rule, nor do we see how such is to be formed. Dr. Wood's definition of insanity is so extensive, that almost every prisoner might be defended on this ground. Dr. Bucknill very justly recommends that supposed lunatics should be sent to an asylum for observation before trial. In this way only can the amount or even the existence of insanity, in some cases, be demonstrated, and the moral and legal responsibility of the prisoner ascertained. This excellent advice will, we should hope, meet with attention from the Government when the question comes to be considered.

Returning more especially to the subject of a State asylum for criminal lunatics, Dr. Bucknill advocates a plan which appears to us to be an improvement on that proposed by Dr. Wood. It is, that in all asylums the criminally disposed should be separated from the harmless and tractable inmates. With this we fully accord. The general condition of the patient should be the ground of classfication, and not the nature of the act which sent him to the asylum. A lunatic who has never performed any criminal act may yet be much more criminally disposed than one who has committed one great crime under the influence of a delusion which has disappeared.

But on this subject, as well as on the law of lunacy, we shall probably have much to say during the next session.

In the mean time we recommend these two pamphlets, and particularly Dr. Bucknill's, whose little work is written with an accuracy and clearness, and in a style which indicates him to be a man of great capacity and of profound knowledge in this department. Dr. Wood's is also a most excellent essay, and must have great weight in any discussion on these points. We trust that, when the matter comes before Parliament, the opinions of both authors will receive due weight, and that the anomalies and imperfections of the law may be mitigated, if not entirely removed.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM JOURNALS.

ON THE CONTAGION OF SECONDARY SYPHILIS.

The important experiments which have been lately made in Paris on the inoculation of secondary syphilis have been already noticed by us. In a most valuable essay by Dr. Waller, in the *Prague Quarterly Journal*, are some very strong arguments in favour of the possibility of communicating some forms of secondary syphilis. Dr. Waller commences his paper with references to the extreme opinions held during the 15th, 16th, and 17th centuries as to the contagion of all forms of syphilis, and to the sounder views of Hunter. He then remarks, that the numerous experiments of Ricord, urged as they have been with all the talent and energy of that active observer, have been received by many physicians as unanswerable. Having himself repeated all these experiments, and confirmed most of them, Waller has always considered himself a disciple and defender of Ricord, and was inclined to believe, that the older evidence in favour of the contagion of secondary syphilis was illusory, and that the arguments of Cazenave were insufficient. But he has become convinced that secondary syphilis is actually contagious, and supports this by clinical observations, and by experiments with inoculation.

1. *Clinical Observations.*—Waller observes, that persons sometimes apply for advice with broad condylomata, (the so-called mucous tubercles or mucous papules, &c.,) who have neither had, as far as they know, either primary sores or gonorrhœa, and on whom no cicatrix of chancre can be formed. The "mucous tubercles" are, in such a case, the first expression of the poison, and are followed by other secondary symptoms. Four cases are given in support of this statement, of which we give abstracts:—

The ninth child, two years old, of healthy parents, whose eight previous children had been healthy, was found to have broad condylomata (mucous tubercles) of both labia, and about the anus. The only apparent source of the disease was, that the nurse who had for three months had the sole charge of the child, had broad condylomata at the angles of the mouth, the inner part of the lips, and about the vulva, while there was also the cicatrix of a chancre at the same point. The three other cases were those of mothers, who, being quite healthy, were delivered, then contracted syphilis, and brought their children subsequently to Waller. Each child was between two and three years old, and had broad condylomata on the genitals, and exudation on the mucous membrane of the lips, the angles of the mouth, and the tongue. Two of the children had afterwards a macular syphilide over the whole body. The mothers had exudation on the lips and tongue, broad condylomata of the genitals, vaginal catarrh, and cicatrices of chancres. That the children's disease was not hereditary from the mother, was evident from the mother's disease being contracted after the children were born; and the only other explanations are, that it was hereditary from the father, (which we presume was not the case, though Waller does not allude to the possibility,) or that it was absolutely caught from the mother. This last explanation is probably the correct one.

Further, Waller alludes to a case in which there were broad condylomata about the anus, and which seemed to be communicated to a younger brother, who slept in the same bed with the diseased individual.

A similar case is related by Biett, and Ricord has been compelled to admit the transmission of mucous tubercles, though he never succeeded in inoculating them.

Besides mucous tubercles (broad condylomata) other secondary forms can be manifested as the first syphilitic symptom. After alluding to the observations of Musitanus, Sydenham, Portal, Swieten, Cullerier, Biett, Cazenave, and others, Waller relates the following remarkable case. A woman in perfect health, and married to a healthy man, who had never suffered from syphilis, received a child from the Foundling Hospital to suckle. This was in December, 1847. Towards the middle of February, she noticed on the left, and a week later on the right, breast, a red spot, which gradually became elevated, and at the time she applied for advice, on the 6th March, there was on each breast a regularly formed, broad condyloma. At this time also she had deep ulcers on each tonsil, and catarrh of the pharynx; and on the 9th March, an extremely copious macular and papular exanthem over the whole body. Nothing, new or old, could be found on the genitals. She had taken the child, after three months, back to the hospital, where it had shortly afterwards died, and Waller found that it had been sent to the infirmary with the diagnosis of "pemphigus syphiliticus." While she was suckling this child, the woman suckled also her own child, nine

months old. A few days before the mother applied for relief, an eruption appeared on the child, which when seen shortly afterwards, was macular, papular, and tubercular, and had been in some places followed by ulceration. So far, however, though the evidence appeared strongly to show that the foundling had been syphilitic, and had communicated the disease to the nurse, and the nurse to her own child, there still remained the doubt whether the nurse might not have been primarily diseased, though no evidence could be obtained of the fact. But another incident occurred, which seemed to prove absolutely the real origin of the disease. On the 1st April, the mother of the woman, a widow 70 years old, came to Waller. Except that she had no condylomata on the nipples, she had the same symptoms as her daughter, viz., deep ulcers on both tonsils, and a macular and papular syphilide over the whole body. On the genitals was no trace of any present or former disease. This old woman had been in the habit of carrying the foundling a great deal: and Waller observes, that the eruption was most copious on the left cheek and left side of the neck, against which, it seems, she supported the child when it slept.

Another very similar case is related, in which a healthy woman took to nurse a foundling child, which presented a syphilitic eruption. In four months, the nurse had a condyloma on the left breast, a macular and tubercular eruption over the whole body, croupous exudations on the tonsils and on the soft palate, condylomata in the left external auditory meatus, infiltration of a lymphatic gland in the neck, and, at a subsequent period, a tubercular syphilitic eruption. On the genitals nothing could be found. Her own child, six months old, which she suckled with the foundling, fourteen days after the mother was attacked, was likewise affected, and presented mucous tubercles (broad condylomata) about the labia majora and the anus; a month afterwards a macular syphilide, and ulcers on both tonsils; and six weeks later, periostitis of one spina scapulæ. Three months after the mother's outbreak, her step son, sixteen years old, had periostitis, ulceration of the tonsils, and broad condylomata about the anus and perinæum.

In addition to these striking cases, Waller states that he has seen many similar ones, and refers to Bouchut's summary of seven cases.—*Gaz. Med.*, 1850.(a)

The next series of proofs brought forward by Waller are derived from

2. *Inoculation Experiments.*—He observes that, however strong the above and similar cases might be, he was not contented with them, but had recourse to inoculation. All his earlier experiments had failed; but on recommencing them, he determined on selecting patients, not only in good general health, but whose cases he could watch for a long time. The first inoculation was on a boy twelve years old, who had tinea capitis; he was inoculated with matter taken from a woman who had mucous tubercles about the genitals. Eight days after the inoculation red spots appeared at the place, and seventeen days afterwards eight tubercles appeared, which gradually increased and ran together. Twenty-seven days later (fifty-two after inoculation,) a macular syphilide appeared on the skin of the abdomen, the heart, and the back, and gradually spread over the whole, then gradually papulæ, and finally tubercles appeared.

In another experiment a boy, fifteen years old, who had lupus, was *inoculated with the blood of a syphilitic woman*, which was applied copiously upon the scarified arm of the boy. The scarified points healed readily. Thirty-four days later, two distinct tubercles appeared at the point, which ulcerated, and fifteen days afterwards formed an ulcer as large as a pigeon's egg, with a copper-coloured areola. Thirty-two days after the appearance of the tubercles, and sixty-six after the inoculation, there came on an exanthem on the abdomen, chest, back, and thighs, which was an "exquisite macula syphilitica." It passed on, and formed papulæ and tubercles. It was seen by many physicians, and who, without knowledge of the experiment, at once diagnosed it as a true syphilitic eruption. Among other physicians Waller quotes the following:—Oppolzer, Dittrich, Jaksch, Hamernjk, Boehm, Cejka, Kubik, and Riedl.

Waller considers it impossible to refuse assent to the doctrine of the contagiousness of secondary syphilis, and concludes his paper with a brief analysis of Ricord's experiments, and with the expression of his dissent from them, although formerly he had strongly supported them.—*Pray Viertel-Jahrschrift.*

(a) In addition to some of the standard authorities on syphilitic diseases, the observations of Calderini and Rizzi, at Milan, are strongly corroborative of Waller's opinion. The latter concludes that tubercles (a term probably including the flat condylomata) are the principal manifestation of syphilis communicated by sucking. In the English periodicals are several interesting cases by O'Connor (*Lancet*, 1846), Egan (*Dublin Journal*, 1846), Hector Gavin, Acton (*Lancet*). *Vide* also Behrend (in his *Archiv.*, Vol. I.), and a mass of evidence lies scattered in various periodicals.

GENERAL CORRESPONDENCE.

DR. RAMSBOTHAM ON THE FINAL CAUSE OF MENSTRUATION.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your correspondent, "M.D.," has put two questions to me, in the last number of your Journal, arising from the remarks I made in a previous publication, on the final cause of menstruation.

The first,—"Is it not a fact, that, in many cases, the Fallopian tubes become impervious, as a consequence of peritoneal inflammation, and that this circumstance is the cause of sterility, nevertheless the individual menstruates regularly?" If so, "M.D." argues, that the ovule cannot escape as I describe; or, if it does, he asks what becomes of it.

I do not think that in *many cases* the Fallopian tubes are rendered impervious by simple peritoneal inflammation; indeed, I look upon such a condition as very rare. I have not been of late much accustomed to necroscopic inquiries; but for many years, in the earlier part of my life, I never lost an opportunity of making a *post-mortem* examination; and, when the subject was a female, the uterine system was, as a matter of course, an object of interesting investigation with me. I have sometimes on these occasions found one or both Fallopian tubes impervious, but there has almost always co-existed either a morbid state of the uterus, chiefly about the mouth or neck, or, more frequently still, a disease of the ovary on the side where the canal had become obliterated; which I looked upon as the remote cause of the altered condition of the tube. It is evident, that, if one ovary be extensively affected, no ovule could be matured in that gland; and if the patient menstruates, that action is to be ascribed to the integrity of the other organ; while, if both be diseased, menstruation does not occur, and barrenness is also the result.

But there is no doubt that such an occurrence may take place as your Correspondent describes; namely, that the Fallopian tubes may become impervious, the ovaries being healthy; and he therefore very properly raises an inquiry on that supposition. Under such a state ovules would probably be eliminated in the Graafian vesicles, and periodically escape by the grasp of the fimbriæ; and, as a consequence, the uterus would establish a futile attempt at their preservation, evidenced by the secretion of the catamenial fluid. There being no possibility of the ovule becoming vivified it would perish, as in the case of a virgin: perhaps burst, or undergo the putrefactive change, mix with the mucus of the tube itself; and I can see no difficulty in believing that it might be absorbed, together with the fluid lubricating that part of the tube in which it happened to be detained.

Secondly, he asks me whether I mean to say "that, suppose a woman has had sexual congress a few days after menstruation, yet being impregnated at that coition, the ovule so impregnated was the one that escaped at the last menstrual period, and that it will still remain in the Fallopian tube until the next menstrual discharge resolves itself into a deciduous membrane for its use and benefit, and that the strange delay in an expected labour is produced, not by atony of the womb or other causes, but because of the time taken up by the ovum to pass into the uterus from the Fallopian tube, waiting, as I suppose it must, for a deciduous membrane?"

I believe, (but this is mere conjecture, for the difficulty of proof on such a subject amounts almost to an impossibility,) that the ovule retains its vitality and power of being perfectly vivified for some (probably indefinite) time after its escape from its ovarian bed, as the ovules in fishes and frogs retain their vitality after parting from the ovarium for some time before they are impregnated; that if in this interval a successful coition takes place, the ovule that descended into the tube at the last menstrual period is the one impregnated; that by the peristaltic, vermicular action of the tube, it is propelled onwards to the uterus; that the nearer to the uterine extremity of the tube it was when this impregnation was effected, the sooner would it be likely to arrive at the uterine cavity, but that this would depend a good deal also on the activity of the muscular fibres of the tube itself; that from the moment it becomes lodged in the uterine cavity, vascular connexions begin to be formed between it and the maternal structures, which had not hitherto existed during its transit through the canal, and that, from that time till the commencement of labour,—the duration, indeed, of its intra-uterine residence,—the period that elapses is defined to a day, or perhaps to an hour. It appears to me, that the difference observed at different times, not only in woman, but in other animals also, in regard to the interval between conception and the access of parturition,

may be more rationally explained, by supposing that some considerable variation occurs in the time between impregnation and the arrival of the ovum in the uterine cavity, than by any other hypothesis; and this especially, as different physiologists have, in the same species of the brute creation, found that the ovum has descended into the uterus, some at an earlier, and some at a later, date after connexion.

In regard to "M. D.'s" question, whether I believe the ovum waits in the Fallopian tube until the next meostrual period, when a deciduous membrane is to be elaborated for its use and benefit, and his remark, that my paper is somewhat obscure on this point, I acknowledge that I have not expressed myself so explicitly as I intended; and this may be rectified by the simple transposition of the latter part of one of the sentences before the former. I feel obliged, indeed, to "M.D." for pointing out this want of perspicuity, and giving me the opportunity of explaining myself more fully. I have written, "If conception does not happen, the ovule perishes, and the fluid secreted for its advantage, not being required, is allowed to exude externally as a superabundant and useless excretion." I ought to have put it in this way: "The fluid secreted for the advantage of the ovule, not being required, is allowed to exude externally, as a superabundant excretion, and the ovule in time perishes." This would have conveyed my meaning in a clearer manner; for I cannot think the ovule perishes directly it leaves the ovarium, else it could not become impregnated in the tube. It may be, that the commencement of the formation of the menstruous fluid is not contemporaneous with the separation of the ovule from its ovarian nest, but that the ovule parts from its previous connexions some days before the fluid is secreted. If so, should the woman become impregnated in the interval, the secretion is retained, and rendered subservient to its preservation. If conception occur, also, while the ripe ovule still floats in the Graafian vesicle, (the last that passed into the tube having perished,) the fluid is, in like manner, retained to become the deciduous membrane, and consequently does not appear externally. If, however, the ovule has left the ovarium some time, the secretion that announced its departure,—perhaps a few days before,—having become lost, cannot, of course, serve the object for which it was produced; but that would not militate against the uterus, immediately it is vivified, setting to work to form a fresh secretion, for the purpose of its preservation, which is converted into the membrane that becomes the first medium of its communication with the mother; for, although menstruation appears only periodically, in accordance with the periodical maturation and escape of an ovule, the admission of that fact would not imply any incapability on the part of the uterus to furnish the same kind of fluid, to be retained within its cavity, at any period of the interval, whenever impregnation might happen to be effected; and this explanation would not necessarily require that the ovum, after impregnation, should remain in the tube until the next menstrual discharge ought to have appeared.

This point, on which "M.D." inquires, I had further endeavoured to elucidate in my previous communication; for I said, "The position, then, deducible from the foregoing observations is, not only that, whenever impregnation occurs, a secretion is elaborated by the uterus, for the purpose of affording nourishment to the ovum, but that, independently of conception taking place, an ovule, even in the virgin, passes periodically from the ovarium into the Fallopian tube, and, at the same time, the same provision is made by nature for its preservation, in anticipation of its becoming vivified; but that, if this vivification is not effected, the fluid formed flows away,—is cast off, indeed, as effete matter,—and is what we popularly call the menstruous discharge."

This subject is one of such intense interest, as well in a practical as in a physiological point of view, that I cannot but think it deserves to be investigated and followed up by every one whose opportunities permit him to make it an ingredient in his studies.

I am, &c. FRANCIS H. RAMSBOTHAM.

14, New Broad-street, and 7, Portman-square.

[To the Editor of the Medical Times and Gazette.]

SIR,—There are some points in the interesting paper by Dr. F. H. Ramsbotham, on the "Final Cause of Menstruation," in your Number of the 17th instant, which appear to me open to observation. The detection of the ovule by Dr. Letheby intact within the Fallopian tube, while menstruation was going on, proves, I think, that impregnation or vivification of the ovum probably takes place at or prior to the period of the escape of the ovum from the ovarium, and the occurrence of extra-uterine pregnancy tends to confirm this view of the question. The extrusion of the ovule from the ovarium we may consider a gradual process, seeing that ulceration or absorption of the peritoneal covering of the ovarium takes place, as this membrane must be perforated ere the ovum can enter the Fallopian tube; and it appears to me probable that the ovum while in the position of partial extrusion, becomes affected by the seminal influence, and on emerging finally is either a vivified ovum, as a result of such influence, or simply an extraneous body. Dr. Ramsbotham, I think, errs in the view he takes of the menstrual discharge; he seems to consider that this fluid is discharged into the cavity of the uterus during the passage of the ovule along the Fallopian tube, and is retained until that body arrives in the uterus, and then is converted into the deciduous membrane or discharged as menstrual fluid according as the ovule may or may not have received the seminal stimulus. Now, if the secretion takes place prior to the instillation of semen into the uterus, it is reasonable to suppose it would prove an obstacle to the latter fluid reaching the ovum at all; and there is no reason to suppose that the uterus would retain fluid under such circumstances; and I believe in some cases of inversion of the uterus the menstrual fluid has been observed to escape in a fluid state from the general internal surface of that organ. I am inclined to think, therefore, that the question of fructification of the ovum has been settled before, or at the time of the final escape of the mature ovum from the ovarium, and that the change in the uterine cavity resulting in the formation of the decidnous membrane, instead of the menstrual flow, occurs after that period. In the one case, either the impregnated ovum itself, or the presence of semen or spermatozoa in the uterus becomes an additional stimulus to the uterine system generally, which imparts to the already turgid vessels of the uterus an active formative action, so that a secretion or exudation of plastic organizable lymph takes place, as its consequence, upon its internal surface, whereby the ovum, on reaching the uterus, is retained, and becomes attached to its surface; or, the vital stimulus being absent, the turgid vessels simply disgorge themselves by a process of passive hæmorrhage.

The reprodnctive organs must be viewed as a whole, (or a system within a system,) destined to the fulfilment of a definite purpose, in order to arrive at a clear understanding of their functions. Starting from the period of puberty, at which time the ovaries by the natural process of growth have attained a point at which they may be regarded as mature, or fully developed, and with the maturation of the first ovule the uterus (with the rest of the organs of this system) takes on that special action which continues with more or less regularity until life begins to wane; this may be termed a reversionary vital action, intended for accomplishing the purpose of nature, which is the continuation of the species. The female would appear to be so constituted as to possess a proportion of blood greater than necessary for the supply of her own individual system, so that without periodical loss she would become morbidly plethoric; the nutrition of the impregnated ovum absorbs this redundant supply; its excretion is provided for in other circumstances.

The regular course of periodical changes occurring in woman appears to me to be as follows:—On the ovarium attaining its full growth, the necessity of a supply of blood for increase of structure ceases; enough for its maintenance *in statu quo* is all that is required. Its contents, however, now take on a process of development, and the growth of the ovum attracts that which was previously expended upon the ovarium, and the ovum being the more important body, it, on its approach to maturity, exercises a stimulating influence upon the whole uterine system, and a gradually increasing turgescence of the vessels, both of the uterus and its appendages, takes place, reaching its culminating point at the period of the extrusion of the ovum from the ovarium,—thus providing for its preservation by causing the junction of the Fallopian tube with the ovarium, and preparing the uterus to respond to the additional stimulus requisite for perfecting the work; when, if impregnation does not occur, the blighted ovum escapes, the turgid vessels become relaxed, passive hæmorrhage, constituting the menstrual discharge, takes place, and the general erethism of the system subsides. The vascular excitement has, however, been felt by, and an impulse given to, the ovule next in course of development, and the same series of phenomena is repeated again and again. In the event of impregnation occurring, nature, intent upon the fulfilment of her purpose, concentrates her energies upon the perfecting of the new individual, and the uterus and its contents divert the vascular action from the ovaries; after the birth of the infant, vascular activity is taken on by the mammæ,—the temporary source of nutrition for the new-born creature—and here the redundant sanguineous fluid finds its natural outlet, and the uterus and ovaries appear to remain in a quiescent state until lactation becomes, as it were, an habitual condition of the body; the ova then again take on their natural action of growth, menstruation recurs, and the female becomes apt to conceive.

If this view of the question of the final cause of menstruation be correct, it affords a clue for tracing and discovering the causes

of derangement of this function, and of the frequent development of certain diseases in the female at the period of cessation of the menses; for, although the external manifestation of this special vascular action ceases, in general, somewhat abruptly, the probability is, that an oscillating vital movement of the same character, though to a less extent, still goes on for some considerable time after the turgidity of the vessels ceases to be such as to cause an external manifestation of its existence. It will also account for the persistence of those comparatively slight inflammatory and ulcerative affections of the cervix uteri, the source often of much individual suffering and distress, which have recently been brought so prominently before the Profession, and for the difficulty in effecting their speedy removal.—I am &c.,

H. C. Roods, M.D., M.R.C.S.

32, Bloomsbury-street, Bedford-square.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having perused Dr. Ramsbotham's interesting communication on the "Final Cause of Menstruation," contained in the *Medical Times and Gazette* of the 17th, I am anxious to know if, as stated by that gentleman, "the menstrual discharge indeed is nothing less than the rudiments of the deciduous membrane itself," how far this fact is influenced by what is observed in cases of so-called vicarious menstruation.

Supposing, for example, a woman suffering from amenorrhœa has also an attack of hæmatemesis every month, the practitioner attending such a case, putting the facts together, might possibly conclude Nature was "voiding her decidua," so to speak, in a wrong direction. It would be interesting in such a case as this, to know if "an ovule traversed the Fallopian tube and perished" at a time correspondent with the aforesaid hæmatemesis; and in such a case would Dr. Ramsbotham expect to find a deciduous-like membrane formed, altogether independent of the coincident vicarious discharge?

One hypothesis regarding the catamenial discharge, and with which you are no doubt familiar, is, that Nature thereby fortifies herself against any sudden and undue taxation of her powers, such as would be demanded of her for the nourishment of a large uterus and the fœtus therein contained; in this way, also, it would be "connected with the office of reproduction," since such a taxation is never made before puberty, or at an advanced age.

I admit Dr. Ramsbotham's theory of a "final cause" is strengthened by a statement, that the lower animals do not menstruate, and it might be asked, If Nature requires a "safety valve" (as some suppose this menstruous discharge to be) against a coming exigency, in one animal, why not in another? But I have heard some persons express a conviction, that the non-existence of this discharge in some of the lower animals was by no means so certainly proved.

In conclusion, allow me to observe, I am far from wishing to promulgate more "vague and inconclusive theories" by these remarks; at the same time, they may serve the double purpose of stimulating inquiry and eliciting information. I am, &c.

London. A London Surgeon.

THE HOMŒOPATHS.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your autocratic position in the editorial chair of the now incorporated *Medical Times and Gazette*, you have issued your first bulletin, disclosing your future relation to the periodic medical press, in which capacity I wish you that success which the long list of contributions, including many names eminent both in science and practice, fully guarantees.

You also state your proposed relations with the homœopaths, on which I beg you will afford me a small space in your widely extended Journal, in order to examine the dogmas you have laid down, against which I demur for the following reasons:—

I. Because you restrict the term "Regular Practitioner" in a sense not hitherto received by the Profession or the public, to the exclusion of those who treat disease homœopathically. Hitherto all who have acquired a legal title to practise medicine after a prescribed course of study, by several years' attendance at the medical classes, with sufficient practical instruction in the laboratory, dissecting-room, hospital, and dispensaries, and after the age of twenty-one shall have passed an examination by the authorised boards, showing a competent acquaintance with the prescribed subjects of study, received the diploma, and were admitted as regular practitioners, in contradistinction to those persons who may engage in the treatment of disease without such qualification and previous study. This is still the conventional meaning of the term in society, and any such restriction as you propose is not only ungenerous, but unfair, and an uncalled for innovation.

II. Because, like all who possess the previous knowledge of their profession and the legal qualification, those who prefer adopting the homœopathic principle in the treatment of disease,—the homœopaths, as you term them, claim the same free enjoyment of their professional privileges as those who deprecate the principle and denounce the practice of homœopathy; and they therefore resist the attempt at present so actively pursued by many of their professional brethren, and fomented by the Medical Press, by the Medical Societies, and even some of the corporate bodies, who have not hesitated to apply epithets, not only inapplicable, but unfair, and to attempt to exclude without legal power to do so. We ask no new Fellowship,—we only claim the continued possession of our rights and privileges.

III. Because you blame the homœopaths as having originated the system of abuse and invective which you admit the others were not slow to follow. This is a point to be settled by a reference to dates; but, whoever initiated the practice, I entirely concur with those who discard it as neither argument nor evidence, though often substituted for both; and I trust that the future career of your journal will not be bloated with the virulent personality which is glaringly exhibited in some of your contemporaries.

IV. Because, in all questions of mere professional principle and theory, the fair and free discussion should be conducted with courtesy and decorum; and, therefore, the subject which at present is the topic of such general interest should be treated with that calmness which its importance demands. I propose the following modification of your grounds against any congeniality in the professional discussion or practice:—

1. Professing the same object, "the cure of disease," both seek the success of their system according to their conscientious convictions, although they may not use the same drugs in the same quantities, or prepared in the same manner.

2 and 3. Each follows his own course, without necessarily condemning the practice of others as erroneous, or rousing their indignation or contempt.

4. Let any medical man who can only view homœopathy as a fallacy and deception, avoid it, and the homœopath also, if he pleases; but he is certainly neither entitled to stigmatise him, when duly qualified, "as a foolish dupe, nor a cunning and dishonest pretender."

The 5th ground is so utterly beneath consideration, that it is surprising you should have penned it.

On the subject of consultation, it is scarcely worth while noticing it, were it not for the injudicious prominence which has been given to it in certain quarters. As the first step in treatment is to ascertain the seat and nature of the disease, more especially in obscure and difficult cases, there does not seem any good reason why difference of theory should prevent the consultation as to the facts of the case. All medical men use the same modes of examination, and the phenomena of health or disease are exhibited alike to all, whatever the theory of treating it may be. And, as every one has an inherent right to refuse meeting in consultation, there surely was no necessity for the formal decree which some of the Colleges have issued, but which the Council of the Royal College of Surgeons have declined as not being expedient, without in the least giving any approval of either party.

Diagnosis must be the same, whatever course of medicine is adopted; and surely it was a careless oversight, when you concluded your article with the following sentence:—Between such methods of diagnosis, there is no real correspondence; and to pretend that any enlightenment could follow a conference between the practitioners of two such opposite systems, is merely to attempt to impose on the public."

Before concluding allow me to refer to the attempt to prevent students, after passing their examination, from obtaining their diploma on the pretext of their future intentions. Such a course is not only unjust to the students, but also to the public at large, whose only safeguard is the guarantee that a sufficient course of study of all the branches of knowledge required for the successful treatment of disease has been gone through, and that they have obtained their diploma as the document of having passed their required test. To refuse this, is to lay open to any unqualified pretender, who may appear in the field of medicine or surgery, many of their many departments to the manifest danger and disadvantage of the public at large. Trusting to your impartiality, I beg you will allow this letter to appear as soon as the crowded state of your columns will permit.—I am, &c.,

St. Andrew's. W. Macdonald, M.D. and P.

[We have resolved to insert the foregoing letter, after much deliberation, and with some hesitation.

As we decline to recognise the class of practitioners to whom

Dr. Macdonald belongs, as members of our Profession, we can scarcely permit their communications to appear in our Journals. If Dr. Macdonald's letter referred to anything else than the position in which the homœopaths are regarded by the regular Profession, we should certainly not have inserted it; and we only now do so, that we may show, once for all, and conclusively, the lameness of those arguments by which our opponents seek to set aside the judgment at which we have arrived. We shall notice Dr. Macdonald's pleadings in his own order, and attach the same numbers to our replies that he does to his several paragraphs.

1. Dr. Macdonald complains, that we restrict the term "regular practitioner," and asserts, that all who have been licensed to practise by the various licensing boards, are entitled to receive it. Dr. Macdonald confounds the word "regular" with the word "licensed," and the word "practitioner" with "doctor" or "surgeon." That many of those who have disgraced the Profession by becoming homœopathic practitioners are "licensed doctors," is admitted; but that they profess the same science, or practise the same system, we deny. That a "wide gulf" separates the practitioner of homœopathy from him whom the homœopaths unjustly and falsely nickname an "allopath," is the doctrine continually taught by Hahnemann. If the founder of homœopathy constantly insisted on the separation,—if the whole Profession have shown their concurrence in his opinion, why should there be any complaint when this separation is recognised as a veritable reality—a great fact? Still it may be objected, that we assume the title of "regular." We are surely entitled to consider the Hippocratic system as *the* regular system. "Such is still the conventional meaning of the term in society," and this is an argument which weighs powerfully with Dr. Macdonald.

2. Dr. Macdonald states, that the "homœopaths claim the same free enjoyment of their professional privileges as their opponents." We have yet to learn that, in our article on *our* relations with the homœopaths, we denied them this. They have the right to practise, and this we neither refuse nor grudge them. But their attitude to the Profession, and their whole character, forbid us from conceding more. We permit them to practise, but refuse to admit them to our Colleges; the one is their legal right, the other a concession which would be as unnecessary as it is unbecoming.

3. Dr. Macdonald finds fault with us for blaming the homœopaths for having originated a system of abuse and "invective," but admits that a reference to dates will settle that point. Of course it will; and if Professor Macdonald will make the necessary reference, and prove us to be mistaken, we shall be ready to tender an ample apology. Let this knight-errant of homœopathy remember that Hahnemann states, that "the pernicious practice of the old school could only be followed by men who are insensible to the stings of conscience,"—that, in a pamphlet published a few years ago in Edinburgh, understood to have emanated from Drs. Drysdale and Russell, and to have been revised by Professor Henderson, these men have the singular audacity, the incomparable meanness, and the disgusting ribaldry to remark: "The greater part of the emoluments of medical men of the old school arises from the imperfections of their practice.....Their patients lie long on their hands, for the most part, and their attendance is profitable in proportion." We could fill our pages with examples of similar vulgar abuse.

4. Discussion, says Dr. Macdonald, should be conducted with courtesy and decorum. With this we perfectly concur, and defy Dr. Macdonald to prove that in our articles we have violated these principles. If Dr. Macdonald really knows what homœopathy is, (which we doubt,) he must be aware that the issues to which he proposes to restrict the discussion could not be admitted by either party. Why should he call on us to endorse the homœopaths as honest men? We see the needy of our Profession—the man whom the legitimate path failed to conduct to success—the ruined railway speculator—the rolling stone that has everywhere failed to gather moss—we see all these flocking to homœopathy, and charity itself cannot avoid suspicion. We might as well give a certificate of character to the bands of adventurers who daily flock to California.

5. Dr. Macdonald's objection to our fifth ground convinces us that he is utterly ignorant of homœopathy.

He asserts that the first step in treatment is to ascertain the seat and nature of the disease. Hahnemann calls such a proceeding an "arrogant and ludicrous pretext." Rau says: "The physician whose researches are directed towards the hidden relations in the interior of the organism may daily err." And Hahnemann continually teaches that "the totality of the symptoms are the sole thing the physician has to take note of." To assert, as Dr. Macdonald does, that diagnosis must be the same whatever course of medicine is adopted, is a gross mistake. The method of diagnosis recommended by Hahnemann is altogether different from that of the regular school; in short, notwithstanding all Dr. Macdonald's attempts to persuade us to the contrary, we prefer to believe the assertion of Professor Henderson, and Drs Drysdale and Russell, that

"Homœopathy does not aim at the introduction of a new practice into a solitary branch of the medical art, but demands for the field of its sweeping reformation the whole territory of practical medicine, joins issue with the old system on every inch of its possessions, and has to beat it from its fastnesses among the morasses of false experiences, and the jungles of crude hypotheses."

But it is not our part to teach this St. Andrew's Professor the rudiments of homœopathy, and we have now said enough to show that the ground we assumed in our first Number, in regard to homœopathy has not been rashly taken up, and will not readily be abandoned.

Who this William Macdonald is, who signs himself "M.D." and "P." our readers may be curious to know; hereafter we may perchance indulge them. For the present we leave to the youngest of our contemporaries the task of chronicling the illustrious obscure of the Profession. Once or twice we have stretched out our hand to take down our editorial rod, but we forbore;—to castigate this pretender to science as he deserves would be but to confer on him the notoriety he seeks, and might serve besides to insult through him a University which we profoundly respect, and which feels its character already sufficiently outraged by his forcible intrusion.—Ed. *Medical Times and Gazette.*]

MR. SYME.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the *Medical Times* for the 13th of December last it was stated that "he (Mr. Syme) has the merit of having revived an operation which, some few years ago, received condemnation as dangerous and unfit for general performance." With reference to this statement, I requested you to say when, where, and by whom the operation had been performed before I proposed it.

You replied, in the first instance, that the information desired would be found in Malgaigne's Operative Surgery, which contains no allusion whatever to the operation in question; and when again asked to make good your statement, referred me to the Surgery of Desault, who died more than half a century ago, for the account of an operation to relieve retention of urine, which it does not appear that he ever performed, and which his editor, Bichat, has justly characterised as useless.

You say, "And now, we beg to request Mr. Syme that he will reply to our question, asked with no ill-feeling towards himself, but solely in the cause of truth,—does he still call himself the originator of the 'incision extérieure?'" If you mean by this expression the simple act of opening the urethra upon a grooved director, I certainly lay no claim to it, as being a procedure no less ancient than lithotomy by the apparatus major, of which it constituted an essential part. But if you understand by "incision

extérieure," the remedy of stricture by external incision upon an instrument previously introduced through the contracted part of the canal, I do maintain that this mode of treatment originated with myself, and shall continue to do so, unless it is shown when, where, and by whom the operation was performed before I proposed it.
—I am, &c. JAMES SYME.
Edinburgh.

[In reply to Mr. Syme, we must refer him, and such of our readers as are interested in the question at issue, to the extract from Desault, given at page 72 of our present volume. We will conclude our part of the matter by telling Mr. Syme a story:—

Willie Wilson and his wife quarreled, and all about the mode of blowing the fire before bellows came into fashion. Willie said, that a bour-tree puff—that is, a pithless branch of the elder—was used; his other half insisted that it was a fir puff. Now, Willie was just like John Tod,—a terrible man. But his wife was worse; she was as obstinate as Mr. Syme. So from words they came to blows, and Mrs. Wilson got the worst of it. But the passion was strong even in death; and "Fir puff yet, Willie Wilson!" were the last convulsive words the poor lady uttered from under the table.—ED. *Med. Times and Gazette.*]

PROPOSED HOSPITAL FOR INCURABLES.

[AN important proposition, relative to the establishment of an Hospital for Incurables in this Metropolis, has emanated from Mr. George Sampson. This gentleman, it would seem, nearly a year ago, printed and circulated a letter among his friends and the charitable portion of the public, advocating the foundation of such an Institution. This appeal, to use his own words, was immediately and most liberally responded to by many expressions of adhesion and approval—donations and subscriptions to a considerable amount were promised, an account opened at Messrs. Coutt's, and a suitable house obtained. On this important subject, we have great pleasure in inserting the following letter from Mr. Sampson, to which, as it is addressed more particularly to the Profession, we beg to direct the attention of our readers.—ED. *Med. Times and Gazette.*]

[To the Editor of the Medical Times and Gazette.]

SIR,—On attempting so important a step as the establishment of a new hospital, I consider it due to the Profession of which I am a member, to state the main objects which it is hoped will be effected by such an institution in London.

I have long since learned, from my experience as an hospital surgeon, that the most distressing cases of disease and suffering are those which derive the least benefit from general hospitals as at present constituted; the rules of those institutions, in most instances, forbidding the admission of cases of an inveterate nature, or requiring their dismissal when they become so.

The unfortunate patients who are thus circumstanced, are often left without any resource but the workhouse, or the gratuitous assistance of medical men in whose neighbourhood they happen to be placed. This assistance is always most generously bestowed; but it cannot be accompanied by the comforts and attentions which are so peculiarly required in these cases; such as well-ventilated rooms, appropriate diet, and the attendance of experienced nurses.

It is well known that benevolent and charitable persons often expend considerable sums in sending such patients from hospital to hospital, with the view of obtaining for them a little temporary relief, even long after all hopes of recovery have been relinquished.

To remedy this great social evil, I have been endeavouring, for many months past, to interest my friends and others to assist in providing an establishment for the reception of such cases, under the name of an "Hospital for Incurables."

This name may be considered to include many medical as well as surgical diseases; but an establishment calculated for both must be of such enormous magnitude, that I have at present only ventured to ask for the means of providing for surgical cases, and, of those, only one or two classes would at first be received.

In accordance with the spirit of such an institution, it is by no means intended to court the admission of cases manifestly requiring operations, for, it is assumed that a large proportion of the patients would have had the benefit of the opinions of our eminent hospital surgeons; it is therefore to other measures that attention would be principally directed.

With a view to the extension of those means of relief which the present state of medical science can render, advantage would be taken of an improved physiology and pathology, and more especially of the progress made of late years in animal chemistry and microscopical observation. I propose that a gentleman fully qualified to conduct such investigations, should be constantly attached to the hospital, and I entertain the hope that, by these aids, and the ample field of observation which such an establishment would afford, a little additional light might eventually be thrown upon some of these obscure and intractable diseases.

Such is the general outline of my plan, and, if it be supported by the public as generously as it has been by those to whom I and my friends have hitherto applied, I trust it will prove in some degree a benefit to society. It certainly may be the means of removing a vast onus from medical men, especially those who reside in the country.

As such an hospital cannot clash with the interests of any other, and as all presumptuous ideas of rivalry with other institutions are utterly disclaimed, I venture confidently to hope for the moral support of the Medical Profession; and I beg to add, that I shall feel greatly indebted to any one who may be disposed to favour me with suggestions in furtherance of this undertaking.

I am, &c. GEORGE SAMPSON.
2, Eaton-place.

CERTIFICATES OF LUNACY.—MR. SERJEANT WILKINS IN DANGER.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the proceedings of the Commission in Lunacy *re* Cumming, it is reported (*Times*, January 14) that Dr. Davey, the Resident Medical Superintendent of the Colney Hatch Lunatic Asylum stated, that all right thinking men believe in "clairvoyance;" and he considered that if Mr. Serjeant Wilkins argued that "clairvoyance" is nonsense, the assertion on his part would indicate "unsoundness of mind to a certain degree."

Now, it is quite clear, that if Dr. Davey, who is, I presume, a "Physician duly authorised to practise as such," (under Schedule C, sect. 45, Act 8 and 9 Vict., cap. c.,) being of this opinion, signed one "medical certificate," and another mesmerist signed the other "medical certificate," it would only require some "kind friend," say a rival barrister, to sign the "order for reception," and the forms prescribed by the above Act being complied with, the learned Serjeant might—at all events for a while—be bagged with as little ceremony as one of his own briefs. I am, &c. WIDE AWAKE.

TRACHEOTOMY.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your Number for January 17 is a case of tracheotomy, described by Mr H. Smith. On reading it my recollection of a case at the Middlesex Hospital, when a dresser under the late Sir C. Bell, occurred to me. A very stout fat man, with affection of the larynx, rendering this operation necessary, came in, and, so far as my memory goes, under local and general treatment the man did well. Sir Charles had an aversion, I believe, to introduce the tube during the acute stage of this affection; and preferred making a mere opening to allow of air to pass in and out of the lungs. In the above case, I remember he cut out one of the cartilaginous rings. In mentioning this case, I do so to seek information as to whether experience proves it best at once, in any case requiring tracheotomy, to insert the tube or to wait for the subsidence of active symptoms. The tube, as a foreign body, may be considered as producing some excitement and embarrassment I conceive. I have seen a man walking about the country begging who was operated upon by Mr. James, of Exeter, many years ago. Mr. James made a sufficient aperture for the man to breathe, and from the morbid change in the parts above not allowing sufficient air to pass the glottis, the man was supplied with a sort of silver lark-whistle, which he constantly wore in the trachea, and when he spoke he always put his finger on the hole to direct air through the constricted passage above to enable him to do so. I am, &c.

A COUNTRY SUBSCRIBER.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

C. Hawkins, Esq., President, in the Chair.

Dr. Jenner presented specimens of

CRIMSON OR HÆMATOID CRYSTALS (OF VIRCHOW), AND CALCIFICATION OF THE MINUTE ARTERIES OF THE CEREBRUM.

The beautiful rhomboidal crystals under the microscope were obtained, Dr. Jenner stated, from what appeared to be an old clot in the right corpus striatum and white matter adjacent, of a woman about 60 years of age. Although these bodies were first figured by Sir Everard Home, they were not fully described in detail till Virchow published his memoir on Morbid Pigment in the first volume of his "Archives für Anat. Pathol." Under the microscope might also be seen much orange-coloured, amorphous, and more or less granular matter, in which the crimson crystals lie. Both the orange-coloured granules, and the red crystals are, Virchow states, modifications of hæmatosin, and therefore he terms the latter hæmatoid crystals. Independent of the interest which their appearance might excite, they are probably of some practical importance, for it would seem, that, whether really, as Virchow states, a crystalline form of hæmatosin or not, they are never found unless preceded by stasis of blood,—and that several days, perhaps weeks, are required for their formation. The earliest period at which Virchow knew them to be found was seventeen days. This was in the case of an individual who had received an injury whereby extravasation of blood was produced. With reference to the case from which the crystals under the microscope were obtained, it was a matter of great interest to determine the age of the clot. The woman had had no paralysis of the left arm or leg, and very trifling loss of power in the muscles of the left side of the face. She died from apoplexy, with right hæmiplegia, of two days' duration. An evidently recent clot occupied the left corpus striatum and optic thalamus, and a clot of considerable size, having a somewhat orange colour, and containing the crimson crystals, a part of the left corpus striatum and adjacent white substance. Now, what was the age of the clot on the right side? Was this woman walking about without any signs of paralysis of the left arm or leg, with a large clot in the right corpus striatum and white matter adjacent? Many of the minute arteries in the corpora striata, and a few in the white matter of both hemispheres were, in the same subject, the seat of a deposit of calcareous matter. The deposit was in some cases limited to the middle coat, and in several the calcareous matter existed in the form of minute granules, giving only a clouded appearance to the coat. Hydrochloric acid dissolved the calcareous matter,—giving off bubbles of gas, probably carbonic acid. The coats of the arteries, after the action of the acid, looked perfectly healthy. The walls of a few of the capillaries were studded with fat. Some of these calcified, and also many of the apparently healthy minute vessels of the white substance of the hemispheres were filled with orange-coloured granules, no blood discs being perceptible among them. Dr. Jenner thought these granules had been formed during life, as a consequence of congestion, from which the patient had been supposed to suffer, and that their presence must seriously have interfered with the circulation through, and consequently with the functions of, the cerebrum. He adverted to a case that lately fell under his observation, in which the external coat of the minute arteries of the brain was greatly thickened by fibrous tissue, and to the effect on the cerebral function which this condition might have produced.

Dr. Baly referred to a paper on the anatomy of thrombus by Sir E. Home, in which these bodies are spoken of as being found after a certain period; so long a period, indeed, that he (Dr. Baly) thought they must, in Dr. Jenner's case, be referred to the earlier date.

Mr. Solly inquired of Dr. Jenner, how much of the corpus striatum and optic thalamus had been left intact on the right side? The question he thought interesting in a physiological point of view.

Dr. Jenner read that portion of the case which referred to this point; from which it appeared that about three-fourths of those bodies were normal.

Mr. Solly remarked, that it was interesting to notice how much of these bodies could be destroyed without the occurrence of paralysis.

Mr. Solly presented a specimen of

NECROSIS OF A PORTION OF THE HEAD AND NECK OF THE THIGH-BONE.

The sequestrum is about an inch in length and half an inch in breadth. It is quite detached from the sound bone. The cavity in which it is contained occupies the neck and head of the femur, and the centre of the articulating surface of the head of the bone is quite absorbed. The joint is obliterated by the absorption of all the cartilaginous surfaces and synovial membrane. The head and neck of the femur are fully united to the pelvis by a firm fibrous tissue, forming a complete but not osseous anchylosis. On the anterior surface of the neck of the bone, just in front of the anterior intertrochanteric line, there is an opening through the sound cancellous structure about the size of a horse-bean. This allowed the exit of the pus into a fistulous abscess, which runs behind the tendon of the rectus to the outer side of the thigh. The subject of this disease was a young woman, aged 32, who was under Mr. Solly's care in St. Thomas' Hospital. She traced the disease to an injury received when she was 12 years old. Nine years ago she was under Mr. Solly's care, and the disease of the joint was so far arrested that she was able to walk well and without pain with a high shoe; but she abandoned the use of it, not liking its appearance, and got fresh inflammation in the joint, but remained suffering for some years without any medical treatment. She died with ulceration of the intestines, with a large fatty liver, and disease of the ovary. Mr. Solly considered that the necrosis was consequent on the supply of blood being partly cut off by the ligamentum teres, and the obstruction of the other arteries of the head of the bone by general inflammation of its cancellous tissue. Mr. Solly remarked, that if the health and general power of the patient when she went into the hospital had warranted any operation involving loss of blood, and the exact condition of the necrosed portion could have been ascertained during life, it might have been removed by a little enlargement of the osseous aperture.

Mr. Solly inquired of Mr. Stanley whether, in his experience, he had met with such a case as that he (Mr. Solly) had just narrated.

Mr. Stanley, in reply, asked Mr. Solly which, in his opinion, was the original malady, the diseased hip-joint or the necrosis.

Mr. Solly believed that the disease originated in the synovial membrane of the hip-joint, and that ultimately necrosis of the femur occurred. Such was his opinion, but, unfortunately, he had not been able to obtain such information respecting the case, as to satisfy his mind that his opinion was quite correct.

Mr. Stanley replied, that it would be of course difficult to make out such matters quite satisfactorily. He had met with such cases, and generally in females of from 20 to 25 years of age; there would be sinuses discharging freely for years, and considerable suffering. The probe passed in deeply, and struck upon dead bone, but the evidence of its being loose, was not usually satisfactory. If such were discovered during life, it would be right to attempt its removal, but not otherwise.

Mr. Wm. Adams exhibited for Mr. Mackmurdo a specimen of

EXTENSIVE LACERATION OF THE LIVER, WHICH THE PATIENT SURVIVED SEVEN WEEKS.

J. W., aged 23, admitted into St. Thomas's Hospital in a state of extreme collapse, having been squeezed between a cart-wheel and a post. He remained without any re-action for nearly forty-eight hours, and then slowly revived, having taken a very large quantity of brandy. Symptoms of peritonitis supervened, and were somewhat relieved by calomel, &c. The abdomen remained swollen, with distinct fluctuation on the right side. Oppression at the chest, with difficulty of breathing, gradually increased, till his death, which took place seven weeks and two days after the accident.

Post-mortem Examination.—Right side of chest more prominent than the left. Abdomen uniformly tense. On opening the chest, the right pleural cavity appeared to be filled with turbid serum, tinged with blood, in which was a large quantity of imperfectly coagulated blood, about a quart, coated with fibrin or lymph, tinged with bile. The right lung had evidently suffered extreme compression. This fluid also communicated with fluid in the abdominal cavity, through what, at first, appeared to be a laceration in the diaphragm; further dissection, however, showed that the fluid in the chest was not in the pleural cavity; but that the diaphragm had been pushed upwards into the chest as high as the upper edge of the third rib anteriorly and laterally, and internally to the interval between the second and third dorsal vertebræ; below the points indicated, it was adherent to the thoracic parietes. The right lung was compressed into the apex and posterior part of the thoracic cavity; the anterior margin of its base not extend-

ing lower than the interval between the second and third costal cartilages. The substance of the lung was healthy. Continuous with this thoracic extension of the abdominal cavity was a large and imperfectly circumscribed cavity, occupying nearly the right half of the abdomen, bounded below and towards the mesial line by the great omentum, passing obliquely downwards across the right iliac fossa; in this situation the boundary was imperfect, so that the large cavity above described as occupying the right thoracic and right half of the abdominal regions, communicated with a smaller cavity occupying the pelvis, and extending into the left iliac region, and also filled with serum, turbid with pus; the pus being most abundant in the iliac region. These cavities were circumscribed by peritoneal adhesions. There had been slight general peritonitis, a small quantity of lymph being diffused over the surface of the intestines, but the adhesions were principally in the neighbourhood of the cavities above described. The liver was lacerated extensively, the injury extending nearly through the centre of the right lobe, the outer portion of which, nearly detached, was displaced upwards, lying over the heads of the sixth, seventh, and eighth ribs; this portion was of a very light yellow colour on the surface, and extremely pale in its interior. The laceration ran parallel for a considerable distance with one of the largest branches of the right hepatic vein, but no branch of the first or second order appeared to have been opened, though the laceration extended almost to the vena cava. The liver was tilted towards the right side, and one margin of the laceration being drawn towards the ribs, contributed to the deceptive appearance of a laceration through the diaphragm. All the other organs were healthy, with the exception of a very slight laceration of the right kidney.

MEDICAL SOCIETY OF LONDON.

Dr. MURPHY, President, in the Chair.

FIBRINOUS CONCRETION IN THE AORTA: FATTY DEGENERATION OF THE HEART.

Mr. B. W. Richardson presented several morbid specimens, removed from a subject who died under the following circumstances:—The patient was old (78 years), and in last autumn had suffered from cold and debility, but from that attack he recovered. On the 8th of the present month he again became ill, with the same symptoms. From the 8th to the 10th there was but little change; he complained of no acute pain, but of an uneasy sensation over the left lobe of the liver, and of great prostration. On the 11th, the prostration was greater, and the pulse became irregular. On the 12th and 13th, the bowels were relaxed; the tongue was dry and dark; the pulse was more irregular, and the hands were dark; but the intellect remained tolerably clear. At three on the morning of the 14th, he became violently convulsed, and during the day lay in a semi-somnolent, restless condition, with the extremities becoming cold, and the action of the heart very feeble and irregular. Convulsions continued on the 15th, and the other symptoms increased in severity. On the 16th, the circulation was still more languid, and at one p.m. he died.

Autopsy, Twenty-three Hours After Death.—The lungs were large and healthy, full of air. The heart was dilated and flabby, its structure soft, and in the first stage of fatty degeneration. In the left ventricle and aorta there existed a large firm fibrinous concretion, which filled up the arch of the aorta, and sent prolongations, several inches long, into the arteria innominata, right carotid and subclavian, and into the left carotid and subclavian arteries. This concretion weighed 170 grains, and entirely filled up the aortic orifice. The left side of the heart was loaded with dark coagulated blood. The liver, kidneys, and spleen were softened, and very much altered in structure. The gall-bladder was greatly distended with a limpid fluid, and in its neck three calculi were found, which effectually closed it. The brain was normal. The heart, the fibrinous concretion, the gall bladder, the kidneys, and portions of the liver and spleen were the parts shown to the Society. In commenting on the case, Mr. Richardson dwelt most on the origin and effect of the fibrinous concretion. There could be no doubt that it had existed previous to death, and most probably it commenced on the day when the heart's action became irregular. There was everything likely to lead to such a deposit,—a feeble heart, a copious discharge of water and albumen from the kidneys, and healthy lungs. The case afforded a good illustration of an opinion which he (Mr. Richardson) had expressed on a previous occasion, viz., that in some asthenic cases the final cause of death is the formation of one or more of these fibrinous concretions in the outlets of the heart, by which the central circulating organ is fairly choked.

Dr. Ryan referred to the arcus senilis, so ably shown by Mr. Canton to be connected with this peculiar degeneration of the heart; and inquired of Mr. Richardson, whether he had noticed it in this case; and, further, whether the patient were jaundiced in consequence of the hepatic disease?

Mr. Richardson said, in reply, that he had omitted accidentally to notice the presence of the arcus senilis, which was unusually distinct, and was indeed the first symptom that led him to suspect the existence of heart disease. The patient was altogether free from jaundice.

Dr. Crisp said, that he thought, if Mr. Richardson or Mr. Canton examined the heart very carefully, he would find that it was not an instance of fatty degeneration of that organ, but of a large deposit of fat on its exterior, which was a very different state of the organ.

Mr. Richardson thought that fat permeated the muscular parietes all through. In answer to a question by Dr. Lankester, he said the heart had not been investigated microscopically.

Mr. Canton suggested, that the organ should be examined under the microscope; because, although well-marked fatty degeneration may be discovered by the naked eye, nevertheless portions of the organ may be degenerated, the change of structure being discoverable only under the microscope. A deposit of fat on the exterior of the heart, which is altogether distinct from fatty degeneration of its muscular parietes, may, however, occur coincidentally with it; that is, the muscular walls of the heart may be in a state of fatty degeneration, while there also exists a deposit of fat on them externally.

Dr. Handfield Jones read a paper on

THE LIVER AND ITS SECRETIONS.

A short summary having been given of the points regarding the structure of the liver that are well ascertained, the three different opinions were noticed that have at present found supporters. 1st. That of Therman, Leidy, and Retzius, to the effect, that the hepatic cells are contained in anastomosing tubes of basement membrane, forming a plexus. 2nd. That of N. Guillot, Gerlech, and Carpenter, who believe that the tubular ducts cease at the margin of the lobules, but are continuous with a plexus of intercellular passages extending throughout each lobule. 3rd. The one maintained by the author, that the ducts terminate by closed extremities, either even and rounded or irregular, and do not expand to enclose the cells in a plexus, or proceed further as intercellular passages. A succinct account of the composition of the bile, taken from the work of Professor Lehmann on Physiological Chemistry, next followed. The cholic, or cholalic acid, is the fundamental organic acid in the biliary secretion; it is united with two other substances, glycocol and taurine, to form the conjugate acids, the glycocholic and taurocholic, which are themselves again combined with soda, forming two salts. Choloidynic acid is isomeric to cholic acid, but contains no basic matter; it as well as another substance—dystrysin—are decomposition products of cholic acid, from which they can also be produced by chemical means. The colouring matter of the bile presents itself in two principal varieties, named cholopyrrhin and biliverdin; the one, as its name imports, being yellow, the other green. The first is found in carnivorous animals and in man; the second in birds, fishes, and amphibia. The opinion of Schlossberger, in opposition to that of Lehmann, was adopted by the author with respect to the green colour of the evacuations often passed by young children, Schlossberger believing the colour to depend on a modification of the bile, Lehmann on the presence of blood. The large quantity of mucus occurring in the bile was noticed, and a source pointed out for it as well in the columnar particles of the epithelium, as in the mucous glands which Thiele discovered in the larger hepatic ducts. In discussing the question as to the formation of bile, the experiments of Thernde were noticed, who extirpated the livers of frogs, but did not find, as he had expected, that biliary matter had accumulated in their blood. From this fact, and from the circumstance that biliary matter could not be detected in portal blood, the conclusion was arrived at, that the bile was formed in the liver, and not in the blood itself. The richness of the blood of the portal vein in fatty matter, as compared with that of the hepatic, the proportion being as 3,225 : 1,885, was quoted as rendering it very probable that the organic matters of the bile were formed out of the oily matter in the blood arriving at the liver. The other secretion of the liver, the glucose or sugar, was next adverted to, and the various facts mentioned which have been ascertained respecting it. It was particularly observed, that while sugar was readily detected by Trommer's test in almost all livers, it appeared to be absent from the organ when it passed into a fatty condition. This had been observed in the human subject, in the fœtuses of animals, and in fishes. The relation of liver-sugar to the disease named diabetes was next considered, and

the theory was propounded, that the formation of sugar in the body being a natural process, our aim, as physicians, should be, not to prevent it, but to animate and invigorate the vital functions in the course of which this sugar is destroyed and eliminated from the system, probably as carbonic acid. Two cases were quoted confirming this view, one from the practice of Dr. Hamilton Roe, and the other from that of Dr. Sieveking. The hypotheses of Schmidt and of Lehmann as to the relations that subsist between oily matters, bile, and liver-sugar, were next expounded. The former considers oily matter to break up into sugar and water on the one hand, and cholic acid and water on the other, its two constituents, glycerine and oleic acid, with certain proportions of oxygen, being equivalent to sugar and cholic acid. The view of Lehmann, which considers cholic acid to result from the union of oleic acid and sugar, was preferred by the author as allowing greater latitude to the bile-generating process. The remark of Lehmann, that the oil and oily acids contained in the bile are for the most part in a saponified state, and his deduction therefrom, that the hepatic cells did not evacuate their contents wherein the oil occurs in a free non-saonified state by bursting, were remarked upon as confirming and extending the author's argument, that unless the ducts at and near their extremities exerted an active elaborating faculty, so as to form the bile out of oily matter, it was impossible to account for the presence of a gall-bladder, filled with healthy-looking bile, belonging to a liver which was no more than a mass of oil, nor how it occurred, that, while the liver parenchyma contained abundance of sugar, none was found in the bile. A view differing considerably from that commonly accepted was next proposed, to the effect, that the cells of the liver were not the constant and necessary agents in the secretion of bile, and that the occurrence of this secretion in them was rather to be viewed as an accidental if not a pathological phenomenon, the real function of the cells being to produce the sugar out of the blood supplied to them, which was then absorbed and carried off by the hepatic vein. The arguments in support of this opinion were, that in perfectly healthy livers of animals, bile is not ordinarily to be seen unequivocally in the contents of the cells, while it is very common in those of persons who have died of various diseases, and that, in extracts made of the parenchymata of various livers, Pettenkoffer's test gave very little or no evidence of the presence of biliary matter. Some other experiments were related as to the action of various cholegogic medicines on the liver, which will elsewhere be more fully related.

Dr. Crisp asked Dr. Handfield Jones if he could tell what quantity of bile and glucose were secreted by the liver of a male adult in twenty-four hours?

Dr. Handfield Jones answered in the negative; his inquiries were not made in that direction, but rather as to the quality than the quantity of those secretions. Bitter and Schmidt, however, have stated that they were in the proportion of from 1-10th to 1-40th of the amount of carbon excreted by the lungs. They had stated this in a paper as yet unpublished, which they had sent to Lehmann.

Mr. Gay inquired whether there had been any restriction as to diet in the cases of diabetes spoken of by Dr. Handfield Jones?

Dr. Handfield Jones answered, that in Dr. Roe's case there had not been any particular restriction. Dr. Sieveking had laid down some rules in his case, but he believed they had not been specially attended to.

Dr. Lankester, after speaking of Dr. H. Jones's paper in the highest terms of commendation, said there were several subjects connected with it which he should wish to hear discussed. The first would be the physiological action of bile on the system. What was Dr. H. Jones's experience as to its excrementitious nature? Evidence had lately shown that, after its admixture with the fæces, it is all taken up again and got rid of,—not by the intestines, but by the lungs. In cases of cholera and diarrhœa, of course this process is not completed, and there is much bile in the stools; but in a healthy state of the system, it is supposed that there remains very little bile in the evacuations, although some of the older practitioners still believe to the contrary. He should like to hear Dr. H. Jones's opinion on the matter. The practical remarks on diabetes were very valuable. The treatment of that disease by a peculiar diet, and by the restriction from food containing a saccharine principle, had all failed, and in his own (Dr. Lankester's) practice tonics only had been of use. He remembered the case of a medical man, for years subject to diabetes, who derived the greatest benefit from creasote, with a generous diet, not restricted to animal food alone, but with vegetables also. Exercise, and being at the sea side were also very serviceable in that case. There are other interesting points in the paper, such as the condition of the bile in various states of disease; but he would not press other questions then, as he hoped to obtain further information on a future occasion. He had only spoken to excite discussion.

Dr. Crisp could not understand either the chemical or the anatomical deductions of Dr. Jones; but he had been long enough in the profession to be aware of the fallacies so often attendant on deductions, and he consequently could not admit Dr. H. Jones's deductions as decidedly as the author had done. There were two points of practical importance alluded to by Dr. Jones. He assumed that the green motions seen in childhood after calomel had been given for some time depended on the bile, which imparted that colour; but he (Dr. Crisp) was inclined to doubt that opinion. He had paid great attention to the appearance of the bile both in adults and in children after calomel had been administered, and he had found it not to be green, but of a lighter, a gruelly appearance. He therefore thought that Dr. Golding Bird's opinion, published many years ago, was the more feasible. Another fact was, with regard to jaundice—a fact which must have been observed by all practitioners—that in diseased conditions of the liver, more especially in malignant disease, the patient becomes jaundiced, although the gall-ducts were free, the biliary ducts being obstructed, and the bile absorbed into the system.

Dr. Snow inquired what other tests were employed to ascertain the presence of sugar in the blood in the hepatic vessels, besides Trommer's? Had it been actually separated as sugar, or was it made to ferment? There are other substances besides sugar that will reduce the salts of copper. He would also ask if it had been ascertained in what state the substances converted into sugar in the liver pass into it,—if as starch, or as dextrine? He (Dr. Snow) supposed it would be in the latter state, and that it was so converted in the stomach. A gentleman in Paris, whose name he had forgotten, after puncturing the fourth ventricle, very near the respiratory nerve, so as to interfere with respiration, found sugar in the urine; and another chemist also found a little sugar in the same secretion from the action of narcotics, which diminish oxidation. The mellitic condition of the urine in the latter case was of course transitory. These circumstances support the view that the sugar is consumed during respiration. The principal part of the process of respiration is carried on in the capillaries, where the carbonic acid is generated; it is only exchanged in the lungs. Dr. Snow concluded by warmly eulogising Dr. Handfield Jones's essay.

Dr. Lankester asked Dr. Handfield Jones whether he had observed cod-liver oil produce any effect on the biliary system?

Dr. Handfield Jones, in answer, said, that he feared his reply would be unsatisfactory, as he did not appear there as a chemist, but had merely endeavoured to lay before them the more recent researches yet unpublished. With respect to the excrementitious nature of bile he had no positive data, but was not in a condition to say bile was not excrementitious, and that it was all reabsorbed into the system. He felt sure, however, that it undergoes certain changes in the alimentary canal, by which it is so altered, as not to be recognised by any of our tests. He was of opinion that bile is excrementitious, but so changed in character when mixed with the fæces as not to be recognised. He did not believe that cod-liver oil exercised much influence on the biliary system. He had not intended to give any deductions as to the formation of bile, but merely to bring forward the views of the German chemists. He dissented entirely from Dr. Golding Bird's views as to the nature of the green evacuations of children. He could not admit that they were similar to those discharges of blood in the adults which are called melæna, nor could he regard them as at all equivalent to hæmorrhage. At all events, a doubt existed on the point, and he (Dr. H. J.) would give the children the benefit of the doubt. (Laughter.) He was obliged to Dr. Crisp for his remarks respecting jaundice, and the obliteration of the ducts in cancerous disease of the liver; it was one of the observations he had been desirous to elicit. He had no doubt whatever as to the efficiency of the tests for sugar, and that sugar was actually present. He had detected it himself, and so had also the German chemists'—a class of men exceedingly careful and slow to admit new views. As to the form in which the saccharine matter reached the liver he was not able to say, but he supposed it arrived there in the form of dextrine. Bernard did not discover any sugar in the blood going to the liver; it must, therefore, have been formed there.

THE ARCUS SENILIS AND FATTY DEGENERATION OF THE HEART.

Mr. Canton exhibited, under the microscope, some specimens of fatty degeneration of the heart, which had been taken from the left ventricle of the preparation brought forward by Mr. Richardson at the last meeting. Mr. Canton stated, that since he announced that this condition was to be associated with the arcus senilis, he had had frequent occasion to verify the truth of his statement, and he believed that the highest authorities on disease of the heart were disposed to give credence to the opinion, and some of them,

he was aware, were in the habit of looking to the eye for corroboration when the heart was suspected. It is true that fatty degeneration exists to a great extent, as a very general rule, in advanced life, and, with other textures, involves the corneal tissue and heart fibre. Nevertheless, sight is uninterfered with by the change, and the lessened activity of the circulation is still adequate to fulfil all the requirements of the system, when the general energy of functions is declining,—when life is on the wane. And Mr. Canton believed that very frequently where persons were said to die of "old age," an increase of this degeneracy of the heart had at last so far involved the organ, that an insufficient amount of unimplicated tissue remained to carry on duly the circulation of the blood, and death, commencing at the heart, ensued. Again, he had examined cases after death where unusual age was attained, with the full possession of faculties and the continued enjoyment of health, and had found that the absence of an arcus senilis was associated with the want of this degeneration of the heart-fibre. One instance was particularly alluded to in illustration, where the person was 103 years of age, and where death was caused by an accident. Mr. Canton believed that the value which attached to the arcus as a diagnostic sign was to be chiefly appreciated when it showed itself in early life; and he spoke of cases which he himself had seen, and some which Dr. R. Quain and others had kindly mentioned to him, wherein the arc added testimony to the symptoms of a fatty state of the heart, and where an autopsy had proved the truth of the diagnosis. Lastly, the difference was clearly pointed out between fatty degeneration and fatty deposition.

Dr. Beith, R.N., said that he had much pleasure in corroborating the statements just made by Mr. Canton. Having been attached for some time to an institution which may truly be called the "cradle of old age,"—he referred to Greenwich Hospital—he had ample opportunity of satisfying himself, by investigation during life, and inspection after death, of the truthfulness of Mr. Canton's conclusions. He had been at some trouble, for some time past, in keeping an account of the cases in which symptoms of fatty degeneration of the heart were prominently set forth; and *post-mortem* examination has shown that that disease was the only one to which the death of the patient could be referred. In all these cases the senile arc was well defined. On the other hand, there have been several examples of the fact referred to by Mr. Canton, viz., the attainment of a good old age without the arcus being present, and death has shown the absence of a degenerate condition of the heart. The great value of this sign would doubtless be, when it is present at an early age, and its important significancy then adds a diagnostic symptom of a disease where all that is corroborative is needed to determine the presence of fatty degeneration of the heart. In addition, Dr. Beith thought that observation almost warranted him in coming to the conclusion, that the habitual constipation so common to old age, will be found to depend on enfeebled action of the intestines, consequent on fatty degeneration of their muscular coat, a point which was also noticed by Mr. Barlow in his able and excellent paper on ramollissement of the brain.

Dr. Murphy, Mr. Richardson, and Dr. Crisp made some further remarks on this degeneration.

Dr. Tilt read a paper on the

CLINICAL ILLUSTRATIONS OF SUBACUTE OVARITIS, WITH REMARKS ON THE DIAGNOSIS OF THAT DISEASE.

After reading the details of ten cases of subacute ovaritis, Dr. Tilt gave a summary, in which he showed how far they threw light on the causes, symptoms, and terminations of the complaint. He then treated more fully of its diagnosis; and observed, *in limine*, that pain, however intense and well localised in the ovarian region, was not a sufficient ground on which to admit the existence of ovarian inflammation, because it might depend on uterine inflammation, or on what Dr. Fleetwood Churchill describes as ovarian irritation, considered by Dr. Tilt to be the same disease as the French pathologists term lumbo-abdominal neuralgia. With regard to the diagnosis of subacute ovaritis, Dr. Tilt remarked, that it was rendered difficult by the similarity of the seat of pain in both complaints, and that, however probable it might seem from the absence of uterine disease, the fixed pain, the occurrence of fever, and the tension or swelling in the ovarian regions, still an examination by the rectum could only give certainty to the diagnosis. Dr. Tilt added, that persons of a nervous temperament are most liable to lumbo-abdominal neuralgia, not brunettes of a sanguine constitution, as in most of his cases. Pain exists in all; but while in subacute ovaritis it is more fixed, continues with the same intensity without regular exacerbation, and is exasperated by any kind of pressure; in lumbo-abdominal neuralgia it is quite the contrary, for although there may be at all times a dull, aching sensation, this is not invariably the case, pain sometimes occurring in repeated attacks, and is relieved by wide or even by continued pressure with the united tips of the fingers. Dr. Tilt agrees with Dr. F. Churchill that ovarian irritation is characterised by a kind of nervous tenderness, which shrinks from the weight of the finger as much as from firm, severe pressure, and not by the positive pain mentioned in Dr. Tilt's cases. There is also in lumbo-abdominal neuralgia, no swelling, no heat, and no pain of the ovaries when these organs are subjected to a rectal examination; whereas heat, swelling, and pain exist in subacute ovaritis. The pain is unaccompanied by any sympathetic pain of the breasts or fever in lumbo-abdominal neuralgia, but not so in subacute ovaritis. The former is so frequent an accompaniment of uterine disease that many pathologists, both here and on the Continent, consider pain in the inguinal region as almost pathognomonic of uterine disease, which on the other hand less frequently induces subacute ovaritis. With regard to the treatment, the repeated application of blisters and opium internally are of most use in lumbo-abdominal neuralgia, but these remedies, valuable as they are in the later stages of the disease, must be preceded by leeches, emollients, etc., in subacute ovaritis. Dr. Tilt then showed the greater liability of young females to idiopathic peritonitis, and to bridles of lymph in the vicinity of the ovaries, and concluded by observing, that "it seems urgent on us carefully to bear in mind the frequency of inflammatory products in or about the ovaries, the frequency of intense suffering in the ovarian regions at the menstrual periods, and the great probability of both facts standing one to the other in the relation of cause and effect. We should also remember the greater liability of young women to idiopathic peritonitis and incarceration from bridles of inflammatory lymph at the very age at which I have shown that even the subacute inflammation of the ovaries is most frequent, and therefore the imperative necessity of watching over the first stages of a complaint which, being too often left to nature, is as frequently productive of serious mischief. Lastly, that subacute ovaritis can be distinguished from uterine affections as well as from lumbo-abdominal neuralgia, and that at all events no harm can ensue from the treatment recommended."

A discussion took place afterwards, in which Messrs. Hird, Canton, Dendy, Tilt, Murphy, Dr. Crisp, and Dr. Ogier Ward took part; all admitted the difficulty and interest connected with the disease under notice.

Mr. Canton stated, that whereas he had frequently been able to ascertain on the dead body the possibility of investigating the condition of the ovaries through the rectum, and by that means only, he did not find that in the normal anatomical condition of the human body the ovaries were capable of being immediately examined by pressure in the inguinal regions. He commended Dr. Tyler Smith's mode of examination by passing a probe through the Fallopian tubes, and said it was easy of performance.

Dr. Tilt replied, that, while admitting the force of Mr. Canton's assertion, nevertheless, when the ovary is increased to double or triple its natural size by inflammatory congestion, it is so pushed forward that, by careful pressure in the inguinal region, a small tumour might sometimes be felt, and the diagnosis could then be confirmed by an examination per rectum. In answer to Dr. Murphy and Mr. Dendy's doubts, as to whether the cases read by Dr. Tilt were not cases of physiological irritation, or erethism of the ovaries, and whether the difference between congestion and inflammation of the organs could be established, Dr. Tilt said, that he could not fix the precise boundary between ovarian congestion and inflammation; but that, when he met with cases where the ovaries were swollen and painful, with heat and commencing fever, these symptoms being totally independent of the phenomena attending menstruation, he considered that they were in a state of inflammation, unconnected with their physiological action. He added, that as numerous observers had met with such cases, it was fair to infer that the same might be still more likely to happen during menstruation, as in fact had occurred in some of his cases. Dr. Tilt admitted that the greater liability of women to incarceration of the ileum by bands of lymph, might be left as a reserved question, although, with Dr. F. Renaud and others, he believed it to be the case; and he referred Dr. Crisp to the work of Dr. Negrier for a case of death by peritonitis, from the bursting of a very small ovarian cyst. To Dr. Ogier Ward's inquiry relative to the constitutional symptoms of subacute ovaritis, he said that they were not of a severe nature, varying according to the patient's constitution,—slight fever in some, hysteria in others, or pseudo-narcotism or derangement of the biliary function.

ERRATUM.—In the report of Dr. Burke Ryan's case of *Suicidal Wound of Throat*, (in the Number for Jan. 17,) *for* "left superior *laryngeal* artery cut across;" *read*, "left superior *thyroid* artery."

PARIS ACADEMY OF SCIENCES.

COMPARATIVE STATISTICS OF DEATHS FROM CHOLERA IN FRANCE, IN 1832 AND 1849.

At the meeting of the Paris Academy of Sciences, January 19th, M. le Baron Ch. Dupin communicated the results of the comparative statistics prepared by him, relative to the effects of the cholera in France in 1832 and 1849.

In 1832, the number of births was 938,186, and the number of deaths 933,733; the increase of the population during that year was therefore 4,453. In 1849, the number of births was 995,466, and the number of deaths 982,008; the increase of the population during that year was therefore 13,458. In order to ascertain the relative amount of loss sustained at these two contrasted periods, the total amount of the population of France must he noticed. In 1832, the total population amounted to 33,547,109, and the number of deaths to 933,733; the proportion of deaths to each million of the population was thus 28,689. In 1849, the total population amounted to 35,727,730, and the number of deaths to 982,008; the proportion of deaths to each million of the population was thus 27,486. From this it appears, that the mortality per million of the population in 1849, was 1203 less than in 1832. If we now calculate the mean of the annual deaths during the five years anterior to 1832, during which time cholera did not manifest itself, we find that the number of deaths per million of inhabitants to have been 25,024, while in 1832, it was 28,689; whence we conclude that the mortality attributable to the cholera in 1832 was 3,665 for each million of the population. On the other hand, the mean annual number of deaths in the five years previous to 1849, was 22,984 per million of inhabitants, while in 1849, it was 27,486; whence we conclude that the mortality due to the cholera in 1849 was 4,502 for each million of the population, an increase of nearly 23 per cent. If the ravages of the epidemic were less marked in Paris in 1849 than in 1832, the explanation is afforded by the circumstance, that the cholera was less fatal in Paris at the latter than the former period, compared with the amount of the population; in fact, in 1849, the rate of mortality in the department of the Seine, was not more than three-fourths of the mortality of 1832. The striking difference between the two invasions of the epidemic consequently consists in the very remarkable fact, that while the mortality attributable to the cholera in 1849 surpassed that of 1832 by nearly 23 per cent., the maximum of the total deaths in the department most visited, was 24⅔ per cent. less in 1849 than in 1832; the maximum being less at the more recent period, although the total loss was more considerable, less impression was produced. In concluding his communication, M. Dupin spoke of the prolongation of human life in France during the last eighty years. From 1771 to 1780 inclusive, the average annual mortality per million of inhabitants, without any extraordinary epidemics, was 33,000; in 1832, the period of the first invasion of the cholera, the mortality rose to 28,689, and in 1849 was 26,024. M. Dupin therefore arrived at the following conclusions:—First. That if the mortality due to the cholera in 1832 were doubled, the total number of deaths per million of the population would not be so great as the mortality which existed from 1770 to 1780, without extraordinary epidemics. Secondly. That if we tripled the mortality due to the cholera in 1849, the whole number of deaths per million of inhabitants would not reach the number which existed in 1770 to 1780. "Such results," said M. Dupin, "need no commentary."

RESEARCHES ON THE PRESENCE OF IODINE IN NATURE, AND ITS EFFECT ON THE GOITRE.

By M. CHATIN.

M. Chatin has been for a long time engaged with researches on the presence of iodine in nature. He finds it to exist in proportions, varying as to locality, in the air we breathe, in the water we drink, in the soil of the earth, and the vegetables it produces. When the proportion of iodine falls below the limit of $\frac{1}{400}$, goitre begins to show itself; when the proportion of iodine falls to $\frac{1}{1000}$, the goitre becomes frequent; when in the proportion of only $\frac{1}{2000}$, this affection is endemic. Hence, he deduces a geographical classification, divided into three zones; one in which goitre is almost unknown, and where iodine is at its maximum, $\frac{1}{100}$, (Paris, Orleans, London); another where it is, so to speak, normal, and where the proportion of iodine is at its minimum, $\frac{1}{2000}$, (certain parts of the Alps); and lastly, a third zone, intermediary between the other two, (Lyons, Chambéry, Grenoble, Soissons,) in which the proportion of iodine varies from $\frac{1}{300}$ to $\frac{1}{1000}$.

ON THE EMPLOYMENT OF CHLOROFORM.

On the occasion of presenting a work to the Academy of Sciences, on the employment of chloroform, M. Sédillot wrote to say, that he had endeavoured in his work to show that pure chloroform, properly administered, never produced death, and that, consequently, the accidents which has frequently been spoken of, the mention of which has tended to bring into disrepute the use of chloroform, have always been caused by the improper methods employed in its administration. "A daily experience," writes M. Sédillot, "of more than four years, have proved that the quantities of chloroform consumed are of little importance, and that insensibility may be maintained for more than one hour at a time, without the least danger, if the proper precaution be taken in the respiratory process. I have often caused chloroform to be inspired for more than one hour, in an intermittent manner it is true, but with continuance of insensibility; and more than 100 and 150 grammes (3½ to 5¼ ounces) of this anæsthetic agent have been consumed, without any accident resulting. I have, therefore, no hesitation in sustaining the position laid down, that in the great majority of cases in which the patients have succumbed under chloroform treatment, great errors have been committed, and which may henceforth be avoided."

ON THE EMPLOYMENT OF SULPHATE OF ZINC AS AN ANTISEPTIC.

M. Falcony states, as the result of his experimental researches, that sulphate of zinc is not only eminently antiseptic, preserving animal substances from decay, but that it actually arrests the progress of putrefaction which has once commenced. The injection of four or five quarts of the solution of this salt in water, through the arteries, suffices for the preservation of a human body in a state of perfect flexibility for upwards of forty days. Anatomical preparations thus made, will serve for dissection for a considerable period; the use of the solution not affecting the steel instruments employed. M. Falcony has also found, that preparations which have undergone change by maceration, resume their original character when immersed in a solution of sulphate of zinc.

MEDICAL NEWS.

University of Oxford.—The Professor of Chemistry, Dr. Daubeny, began his course in the new lecture-room contiguous to the Botanic Garden, on the 28th, at eight p.m. The lectures are to be continued twice a-week (Wednesday and Friday evenings) during the present term, until the course is completed, and will embrace the consideration of the chemical effects of heat, the constitution of the atmosphere and of water, and the properties of the mineral acids and of their bases. Undergraduates desirous of obtaining a certificate of attendance are requested to register their names some time previously to the first lecture, in a book kept at the lecture-room.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 23th inst.:—

Bartlet, John Henry, Ipswich, Suffolk.
Bewley, Charles, Reading, Berkshire.
Burman, William Maxwell, Wath-upon-Deane, Yorkshire.
Carter, William, Catterick, Yorkshire.
Dale, Alfred James, Commercial-road.
Hardy, John Handford, Nelson-square, Blackfriars.
James, William Abel Griffiths, Kirkby Lonsdale, Westmoreland.
Sandwith, Godfrey, Hull.
Stunt, George, Holland-street, Blackfriars.
Taylor, Edward, Staxton, Yorkshire.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, January 22, 1852:—

Berry, John, Leyland, Lancashire.
Gaylard, Everitt Benjamin, Stoke-sub-Hamdon, Somerset;
Hare, Henry Christian.

Royal Medical and Chirurgical Society.—The following gentlemen were elected Fellows, Jan. 27:—George Canney, Esq.; George Borlase Childs, Esq.; John Cooper Forster, Esq.; Charles Case Smith, Esq.; John Edward Stephens, M.D.; John Grove, Esq. At the next meeting, Feb. 10, the following gentlemen will be balloted for:—Charles Bland Radcliffe, M.D.; Charles Ridley, Esq.

Medical Appointments and Vacancies.—One of the physicians to the St. Pancras Royal General Dispensary, Burton-crescent, has resigned; the day of election to appoint his successor

is fixed for the 4th of March next, at ten a.m. Candidates, who must be members of the Royal College of Physicians or graduates of a British or Irish University, admitted by the Committee on the 5th of February. Testimonials to be sent in on or before the 4th, and personal attendance on the Committee requested. Dr. Cogswell, one of the Secretaries of the Medical Society of London, who has been doing the duty of physician for some time past, and who is in every way qualified for the office, is a candidate, and the only one we have yet heard of. Frederick Collins, M.D., Wanstead, Essex, elected parochial surgeon to the West Ham Union.

Naval Appointments.—Surgeons Abraham R. Bradford (1838), to the Magicienne. Robert Graham, M.D., (1843) to the Horatio; Charles K. Nutt (1840), of the Hotspur, 44, tender, to the Excellent, gunnery-ship, at Portsmouth, but stationed at Devonport for gunnery practice at that port; John Simpson (*b* 1849) serving in the Plover discovery-ship since Sept. 14, 1850, is re-appointed to that vessel. Assistant-Surgeons A. Irwin (1851), recently additional of the Southampton, 50, to the Britannia, 120, at Portsmouth; John T. Caddy (1845), for service at Haulbowline Hospital.

Military Appointments.—11th Light Dragoons: Assistant-surgeon Henry John Wilkin, from the Staff, to be Assistant-surgeon, vice Richard Pyper, who retires on half-pay. 13th Foot: Assistant-surgeon Edgar Dumaresq Batt, from the Staff, to be Assistant-surgeon, vice Clarke, who resigns. 60th Foot: Assistant-surgeon James Crerar, from the 76th Foot, to be Assistant-surgeon, vice Payne, appointed to the Staff. 76th Foot: Acting Assistant-Surgeon T. O'Kearney Gordon to be Assistant-surgeon, vice Crerar, appointed to the 60th Foot. Hospital Staff: Assistant-surgeon Frederic J. Ffolliott Payne, from the 60th Foot, to be Assistant-surgeon to the Forces, vice Wilkin, appointed to the 11th Light Dragoons; Acting Assistant-surgeon Arthur Bell to be Assistant-surgeon to the Forces, vice Batt, appointed to the 13th Foot.

Army Medical Department.—The Commander-in-Chief has, on the recommendation of the Superintendent of the Medical Department, and at the suggestion of the Secretary at War, directed, that henceforth, and until further orders, the inspection of recruits by the district Staff Surgeons, under additional instructions to be furnished to them from the Army Medical Department, shall be considered final.

Obituary.— — Williams, Esq., surgeon, of Burslem. Mr. Williams was one of a party of seven who left Liverpool early in last September to form a settlement in Terra del Fuego, where, on their arrival, they were bitterly opposed by the natives, and suffered so much from absolute want of food and the vicissitudes of the weather, that all perished. The date of Mr. Williams's death is not mentioned. On the 20th inst., at No. 1, Dalston-terrace, James Andrew Welch, Esq., surgeon, aged 51. On the 25th of June last, at Spring Bay, Hobart Town, in the 39th year of his age, Wm. Morgan Underwood, M.D., sixth son of the late Rev. Thomas Underwood, rector of Ross and canon residentiary of Hereford Cathedral.

Hospital for Women, Red Lion-square.—An application from the Committee of this Institution to the Court of Common Council was made a few days since for pecuniary aid, and refused.

Sir Philip Crampton.—We have great pleasure in stating that the eldest son of this distinguished surgeon has just been appointed Her Majesty's Minister and Plenipotentiary to the Government of the United States, in the vacancy occasioned by the resignation of Sir H. L. Bulwer.

The "Hope" Prizes.—Two prizes of 50*l.* and 30*l.* each, called the "Hope" prizes, after Dr. Hope, the late Professor of Chemistry in the University of Edinburgh, by whom they were bequeathed, are announced for competition to any student of the class since the session of 1848; essays and preparations "on any chemical subject," to be lodged before November, 1852.

British Medical Fund.—A large and influential meeting of professional gentlemen, the members and supporters of this Institution, took place at the General Infirmary, Northampton, on Wednesday. Dr. Robertson took the chair, and the Secretary proceeded, at some considerable length, to explain the circumstances under which the Society originated, the objects it was intended to promote, and the advantages calculated to result from it to the Profession, if encouraged and supported as he trusted it would be. It was true, he said, that many valuable and useful societies already existed in various parts of the kingdom, having for their object the relief of medical men and their families, more especially alluding in the highest terms to the Benevolent Fund attached to the Provincial Medical and Surgical Association, and hoping it would be considered that it was with a view to co-operate with them, and, if possible, to enhance the usefulness of such societies by extending their principles over a yet wider field, that the British Medical Fund had been established. Having, in reply to several questions, illustrated the various modes by which its benefits might be realised, he concluded by urging on its members the necessity of mutual co-operation and individual exertions in behalf of the undertaking, and expressing his conviction, that by such means it would eventually be rendered second to no institution in the kingdom. Mr. Daniell, of Newport Pagnell, having delivered an interesting and appropriate address, Mr. Leete, Thrapston, proposed—"That this meeting desires to express its highest approval of the principles and objects of the British Medical Fund, and strongly recommends the Society to the warmest support and encouragement of the Profession at large." Dr. Nesbitt, in rising to second the resolution, considered the Society truly in the light of a British Medical Fund, and while it would have his warmest support, he trusted it would receive from the Profession such encouragement as would enable it to maintain its present proud position. Mr. Bryan, in proposing the second resolution, expressed the obligations he considered the Profession were under to Dr. Forbes and the Directors of the Society, and begged to move, —"That the thanks of this meeting are due, and hereby offered, to the Directors of the British Medical Fund, for their indefatigable labours and unwearied exertions on behalf of the Institution." Mr. Mash congratulated Mr. Daniell on the position which the Society was now in, and in a fair way to attain, and concluded by moving—"That the thanks of the meeting be offered to that gentleman for his continued, laborious, and unceasing exertions in behalf of the welfare and interests of his professional brethren."

The number of physicians and surgeons in Prussia is said to be 5,488, and that of apothecaries 1,471.

The President of the French Republic has conferred the cross of the legion of honour on every member of the Sanitary Conference lately sitting in Paris.

Wadsworth *v.* Collins.—This was an action by the plaintiff, a general practitioner in Warwick-street, for the sum of 25*l.*, for medicines and medical attendance on several members of the defendant's family, and was tried in the sittings at *Nisi Prius*, before Mr. Justice Talfourd and a common jury. The defendant paid 17*l.* 10s. into court, and pleaded the general issue as to the remainder. The medical attendance was on a child in convulsions, in December, 1850, and for an endemic of scarlet fever, in which all or nearly all the members of the family suffered. The defence was, that an agreement had been entered into between the parties, that the plaintiff should charge for medicines only, and that the attendance should be gratuitous; and further, the usual absurd plea, that an unreasonable amount of medicine had been sent, of which a great part was thrown away. The jury showed their sense of the folly and ingratitude displayed by the defendant by returning a verdict in full for the plaintiff. The defence against medical charges, that too much medicine was sent in, is a very common one, but a very absurd and foolish one; the only person capable of judging what medicines should be used is the medical man, and not the too often ignorant patient; and the mere fact that a great quantity of it was thrown away is no proof that the plea was a just one, but may be looked upon as a sign, that if the medicine had been taken instead of being thrown away, a cure would have been effected sooner. After a severe illness it is very often necessary to give the vegetable or the mineral tonics for some time, and these very often constitute the medicines thrown away, the result being a very protracted convalescence and permanent debility, leading to another plea often urged against the medical man, that he did not cure the patient entrusted to his care.

Devon County Lunatic Asylum.—In the Report from this Institution, presented to the county magistrates, it is stated, that in consequence of the great increase in the number of pauper lunatics, the boarders of the first class had been discharged. There were then in the asylum 428 patients, the greatest number in the year being 439. The deaths had been very numerous, owing to many persons being admitted in extreme old age and in the last stage of bodily and mental infirmity. The deaths were a fraction more than 10 per cent. The cost of maintenance had been reduced from 7s. 6d. to 7s. 3d. per head per week, which it was believed was about the average of other asylums. The balance in hand was 2780*l.*, being 475*l.* more than last year. 2000*l.* had been paid off the building-fund, (qy. building-fund debt,) leaving a balance of 40,000*l.* The Report referred to the prosecution of the relatives of a lunatic for cruelty, and to two other cases; and also mentioned the loss of the services of the medical assistant, Dr. Parsey, who had gone to the Warwick Lunatic Asylum; and it stated that Dr. Man-

ley had been appointed in his place. It concluded by affirming the continued confidence of the Committee in the medical superintendent, Dr. Bucknill.

SODA WATER.—Mons. Le Franc, of Cecil-street, Strand, is the English agent for one of the simplest and most effective soda water machines we have yet seen. It is strong and cheap; and capable of affording a large supply of water, abundantly charged with carbonic acid gas.

[Advertisement].—TO THE MEDICAL PROFESSION.—The members of the Medical Profession are usually dependent upon their own personal exertions for their subsistence. If health fail, they fall into distress; if they die, their families are unprovided for.

The uncertainty of their incomes often prevents them from making provision for infirmity, old age, or death, by the usual methods of assurance. To meet this difficulty, The Law Property Assurance Society has made the following arrangements for the benefit of the Profession:—

1. It grants special policies of assurance, by which the assured, instead of being obliged to pay a fixed sum every year or forfeit their policies, may pay any sum they please, at any time, according to their means, and for which a proportionate sum will be assured to them by their policy. By this means uncertainty of income is provided for, and no forfeiture for non-payment ever takes place.

2. If the assurer in this office should find that the objects of his insurance after death are no longer required, he may convert his policy into an annuity for his own life.

3. On payment of a small annual sum during their own lives, husbands may secure annuities for their wives or daughters after their own decease.

4. On payment of a small sum annually, professional men may secure for themselves an annuity, to commence on the decline of life, or earlier, should they be at any time disabled, by sickness or infirmity, from pursuing their occupations.

Detailed prospectuses, forms of proposal, and every information, will be immediately furnished on application to WILLIAM NEISON, Actuary and Secretary, 30, Essex-street, Strand, London.

DEATHS *in the Metropolis for the week ending Saturday, January* 24, 1852.

CAUSES OF DEATH.	JAN. 24. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	514	314	233	1061	10891
SPECIFIED CAUSES	514	314	233	1061	10813
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	177	33	10	220	2043
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	3	18	21	42	530
3. Tubercular Diseases	65	100	6	171	1860
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	59	33	35	127	1249
5. Diseases of the Heart and Blood-vessels	1	26	10	37	338
6. Diseases of the Lungs and of the other Organs of Respiration ...	92	51	55	198	2397
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	27	23	14	64	611
8. Diseases of the Kidneys, &c. ...	...	4	12	16	105
9. Childbirth, Diseases of the Uterus	...	6	1	7	115
10. Rheumatism, Diseases of the Bones, Joints, &c.	5	...	3	8	71
11. Diseases of the Skin, Cellular Tissue, &c.	3	...	2	5	12
12. Malformations	6	...	...	6	32
13. Premature Birth and Debility ...	21	2	...	23	227
14. Atrophy	30	1	1	32	158
15. Age	...	...	56	56	698
16. Sudden	6	...	2	8	123
17. Violence, Privation, Cold, and Intemperance	19	17	5	41	244
CAUSES NOT SPECIFIED	...	...	...	...	78

TO CORRESPONDENTS.

We have particularly to request that all communications for the Journal be addressed

To the Editor,
MEDICAL TIMES AND GAZETTE Office,
46, Princes-street, Soho,
London.

Great inconvenience and confusion will thus be avoided, and all letters and papers which otherwise may escape attention, be brought immediately under our notice. Correspondents must direct their communications to the Editor,—neither to the Printer nor Publisher.

Dr. B.—We cannot on any account pledge ourselves to receive "a private and confidential" communication, touching the professional character of a medical man. This kind of thing is as distasteful to us as it is derogatory to our Profession.

MEDICAL DIRECTORY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Permit me, through your columns, to inquire of the Editor or Compiler of the "Medical Directory" how long since Mr. Cyrus Alexander Elliott became a *Surgeon*, as he styles himself in his advertisement of Cowper-house, Old Brompton. I am, &c.,

London. M.D., A SUBSCRIBER.

[To the Editor of the Medical Times and Gazette.]

SIR,—Being fully convinced of the value of the "Medical Directory," every member of the Profession should be desirous of making it as perfect a record as possible; but, if errors similar to the one to which I now allude are allowed to creep in, it can no longer be regarded as a book worthy of our confidence.

Dr. John Armstrong, who is described as *Physician* to the Gravesend and Milton Dispensary, is merely one of the *Surgeons* to that Institution: in confirmation of which, I enclose you a printed list of the medical officers, by which you will see that, when the appointments were filled up, and since which no change has been made, Dr. Armstrong did not possess his Aberdeen degree.

The office of Physician to the Dispensary is filled by Dr. Hawkins.

I am, &c., A SUBSCRIBER.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you do me the favour to state, in your next Number, in reply to a question put by a Correspondent, that if a copy of my "Remarks on the Plea of Insanity" has been sent to the Editor of the "Journal of Homœopathy," it is entirely without my knowledge, and I think it right to state most unequivocally, that I have not the remotest notion who has done so. Messrs. Longman have exercised their own discretion in sending copies to different journals, but the "Journal of Homœopathy" is not in the list of those who have received copies through them. I have never seen a copy of the "Journal of Homœopathy," nor am I, to my knowledge, acquainted in the slightest degree with any one concerned in it.

I am, &c.

WM. WOOD, M.D.,
Licentiate of the Royal College of Physicians.

Bethlem Hospital.

[Dr. Wood's pamphlet is mentioned as received by the Journal in question. We rejoice to see Dr. Wood's denial of having sent it, or caused it to be sent.]

Dr. Carr, of Manchester.—We are obliged by the communication of Dr. Carr, on a case of "chronic poisoning from the gradual absorption of arsenic into the system, it having been prescribed by a chemist." We observe, however, that a trial on this subject is about to take place in the County Court of Manchester. Under such circumstances, therefore, we must at present decline to insert the paper.

WE always endeavour to arrange our Journal in the order of the professional standing of the various writers. Thus we place, physicians before surgeons, and fellows before members; but from this rule, in order to suit the convenience of the printer, we are sometimes obliged to depart. Our Correspondent would not like to see his paper commence at the very bottom of a column, nor a woodcut badly displayed.

WE receive many newspapers, but those who kindly forward them would considerably add to their favour by marking the paragraphs to which they desire our attention should be directed.

[To the Editor of the Medical Times and Gazette.]

SIR,—Permit me to request your attention to an error in the insertion in your last Number of a communication from the Secretaries of the Birmingham Pathological Society. It is by mistake headed "Birmingham Philosophical Institution;" it should have been headed "Birmingham and Midland Counties Pathological Society." Our letter was dated from the Birmingham Philosophical Institution, but the resolutions respecting homœopathy were passed at the annual meeting of the Birmingham and Midland Counties Pathological Society, the Philosophical Institute being the place where our Society holds its meetings. You would, therefore, much oblige the Secretaries by re-inserting the resolutions under the correct heading in your next week's Number. I am &c., S. H. BINDLEY.

17, Newhall-street, Birmingham.

The following Papers are in type, but we have been unable to find room for them this week;—"Dysmenorrhœa," by Dr. RIGBY; "Malignant Tumour of the Head," by Dr. FREDERICK ROBINSON; "Remarks on the Etiology of Phthisis," by Dr. EDWARD SMITH; "Case of Severe Injury to the Head," by W. R. WARWICK, Esq., M.R.C.S., etc.

COMMUNICATIONS have been received from—

Mr. GARDNER, of Southampton; Mr. BRANSBY COOPER, of Guy's Hospital, and Spring-gardens; Mr. CRAINE, of the Isle of Man; Mr. ROBERTS, of Rye, Sussex; Messrs. BLANCHARD and LEA, of Philadelphia; Dr. HAYES HIGGINS, of Birkenhead; Mr. GIBBONS, of the North Dispensary Liverpool; Mr. QUAIN, of University College, and Cavendish-square; Dr. ROE, of Plymouth; Mr. BIRKS, of Manchester; Mr. ROBERTSON of the Kent-road; Dr. HUNT, of Brooke-street, Hanover-square; Dr. RAMSBOTHAM, of Broad-street, and Portman-square; Mr. JONES, of Jersey; Dr. BUCKNILL, of the Devon Lunatic Asylum; Dr. BABINGTON, of Coleraine: Mr. FLETCHER, of the Liverpool Royal Infirmary; Mr. TOYNBEE, of St. Mary's Hospital, and Savile-row; Dr. BIRKETT, of Guy's Hospital, and Wellington-street, Southwark; Dr. DEAN FAIRLESS, of Crieff, Perthshire; Mr. GEORGE SAMPSON, of Eaton-place; A MEMBER OF THE FORMER JENNER MONUMENT COMMITTEE; Mr. EDWARDS, of Llansaintffraid; Mr. AYTON, of Devizes; Mr. BINDLEY, of Birmingham; Dr. WILKS, of Camberwell; Mr. SPENCE BATE, of Swansea; Mr. MILTON, of Jewin-street.

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ORIGINAL COMMUNICATIONS.

DYSMENORRHŒA.

By EDWARD RIGBY, M.D., etc.;

Senior Physician in the General Lying-in Hospital; Examiner in Midwifery in the University of London.

The cases of obstructive dysmenorrhœa which I have hitherto described, have been locally treated by slightly dilating the os and cervix with the dilator, and afterwards by the introduction of a sponge tent. In the following cases of severe and long-standing obstructive dysmenorrhœa, the anterior wall of the os, and part of the cervix uteri, has been divided in the manner proposed by Professor Simpson, of Edinburgh, and thus the constriction permanently removed. In most of the cases in which I have deemed it expedient to perform this operation, the dysmenorrhœa had been of sufficient severity and duration to produce considerable irritation in neighbouring organs,—most frequently in the ovaries, as might be expected, from their close connexion with the uterus, and the important part they play, and also the remarkable changes they undergo at the menstrual periods; not uncommonly in the uterus itself; occasionally in the intestinal canal and elsewhere: hence, therefore, the relief which is produced in such cases by the operation is not always so complete or so immediate as might be expected,—the effects of the dysmenorrhœal irritation continuing to show themselves for some time after.

Mrs. N., aged 30; married six years; never pregnant.

August 13, 1846.—Constant pain of back and pelvis, extending down the thighs, increased by standing, but much aggravated for two or three days before the catamenial period, when it becomes very severe, with bearing down. The discharge at first comes slowly, and is thick, with clots and exsudations, but gradually increases, and then the pain abates; it continues three days, and usually returns slightly on the fifth day. Considerable pain in the left ovarian region. General health good; bowels regular; tongue rough and dry.

Has suffered from dysmenorrhœa, as above described, ever since puberty.

Examination per Vaginam.—Os uteri low and backwards, and so small as to be scarcely perceptible. Uterine sound at first passed as if meeting with a slight obstruction, but afterwards it went easily, in the right direction, to rather more than the usual extent of 2½ inches; some bloody mucus came away. The fundus cannot be felt above the symphysis pubis.

Examination per Rectum.—Left ovary can be easily reached; it feels large and hard, and very tender.

August 25.—I divided the anterior lip of the os uteri with ease. Some amount of hæmorrhage followed.

26th.—Introduced a full-sized metallic tent.

Sept. 9.—I withdrew the metallic tent, it having been worn more than a fortnight; and as she still complained of pain in the direction of the left ovary, I applied some leeches per rectum, which, however, did not bleed well.

Sept. 16.—A catamenial period just over. It was attended with less pain in the direction of the left ovary, and now she is quite free from it. She still complains of constant pain in the back, which seems to be of a rheumatic character, as she has also rheumatic pains in her limbs, turbid urine, &c.

℞ Pulv. guaiaci, magnesiæ, aa gr. x. M ft. pulv. o. m. sumend.

℞ Liq. potassæ ♏ x., potassii iodidi gr. ij., decoct. sarzæ, ℥i, M ft. haust. ter die sumendus.

She returned to her home in the country.

Nov. 12.—Her husband called upon me to say that the catamenia had appeared once since, more naturally than before, but that she still complains of pain in the direction of the left groin, although it is less than before. I expressed to him my hope, that as the great source of ovarian irritation in her, viz., the obstructive dysmenorrhœa, is removed, the ovaries will gradually return to a healthy state.

℞ Acidi nitrici dil., acidi hydrochlor. dil., aa ℥j., decoct. sarzæ co. ℥viii. M. ft. mistura sumat cochl. magn. ij bis terve die.

April 27, 1847.—Complains of much hæmorrhoidal uneasiness. The catamenia have been less clotted since last report, but still she complains of a good deal of pain at the time in the left groin.

As this patient had suffered from obstructive dysmenorrhœa ever since puberty, we may naturally suppose that considerable irritation had been produced in the uterine system, and that the pain in the back was as much owing to a uterus somewhat distended with catamenial fluid, as to the rheumatic diathesis which she evinced in the course of the treatment. The uterine sound showed that the cavity was larger than natural; and this in a woman who had never been pregnant was the more remarkable. Moreover, some bloody mucus was discharged at the moment of introducing it. The left ovary had evidently suffered from the constantly-recurring irritation of these dysmenorrhœal attacks: it could be distinctly felt per rectum to be "hard, large, and very painful." I therefore hoped that by dividing the anterior lip of the os uteri, and part of the anterior wall of the cervix, I should not only remove the cause of the dysmenorrhœa, but, by the bleeding which follows, and which is usually about as much as at a moderate catamenial period, I should relieve the irritable and congested organ by the drain thus produced. The wound healed perfectly well, leaving a fairly open canal into the uterus, but as she still suffered from pain, referrible to the left ovary, I applied some leeches to it by Dr. Locock's tube, introduced per anum; but they did not bleed so much as I could have wished. The general symptoms which remained were those of a rheumatic character; and knowing how much the uterine system is influenced by a diathesis of this kind, I put her on a course of medicines for relieving it. The next catamenial period was attended with less suffering. The last report, viz., in about six months afterwards, still showed that her health was not entirely restored, but that more or less hæmorrhoidal congestion existed,—a condition closely connected with the same diathesis.

Mrs. M., aged 25, married four years, never pregnant.

Dec. 17, 1847.—Delicately formed; complains of pain and bearing down after walking a little distance; slight leucorrhœa. Shortly before a catamenial period she suffers a good deal of pain; but it is still more severe during the last two days. The discharge is attended with clots and shreds. Has been under the care of a highly respected practitioner at a distance, who found ulceration upon the os uteri, and treated it in the usual manner. He also dilated the canal of the cervix by bougies.

Examination per Vaginam.—Os uteri, soft, round; the edge very red, with a small ulceration on the left side. Uterine sound passes with difficulty two and a half inches.

Applic. argenti nitras.

I recommended division of the anterior lip, to produce permanent dilatation, and relieve congestion of the part. As she could not then decide, I prescribed against the next period

℞ Camphoræ, extr. lupuli, extr. hyosc., aa. ℈j. M. ft. pil. xij., sumat ij. omni bihorio dolore perstante.

℞ Lin. camphoræ co. ℥iiss. tinct. opii ℥ss. M. ft. lin. parti dolenti applicand.

Dec. 23.—I divided the anterior lip of the os uteri very completely; a considerable discharge of blood followed. It now appears that she was much nearer to the catamenial period than she thought. A metallic tent was introduced the next day.

Dec. 29.—Has caught the influenza, and, during a severe fit of coughing, the tent was expelled. I introduced a larger one, but this was also expelled; I therefore passed one of the original size, and supported it by a wad of lint dipped in a solution of alum. In this way she was enabled to wear it a fortnight, when it was removed.

Feb. 2, 1848.—Has been staying a fortnight at the seaside, during which time a catamenial period came on. She had some pain, but no bearing down as before. Feels weak.

℞ Confect. rosæ ℥i., acidi sulph. dil. ℥i., Decoct. cinchonæ ℥xij. M. cola. Ft. mist. sumat cochl. magn. ij. ter die.

March 14.—Writes from the country,—the bark mixture has agreed well; appetite good; feels "decidedly stronger." "Had nearly as much pain as usual at the last period, but more for the two days previously than actually during the time, which did not come for some days after I expected, and then the discharge was very free." She has not any sensation of bearing down, though now and then a slight darting pain. Leucorrhœa continues, sometimes slightly tinged with red.

Rep. mistura.

℞ Ext. taraxaci ʒi., o. n. ex lacte.
℞ Infusi anthemidis, decoct. papav., aa. ʒiv. M. ft. lotio.

April 18.—Does not feel so strong; much leucorrhœa.
Rep. med. Lotio plumbi.

Aug. 29.—Writes from the sea-side—"My health has altogether greatly improved, for I can take much more exercise without any fatigue, and my appetite is excellent. I have also gained many pounds in weight." The medical man under whom she was before says that she is much improved, but that there is a slight obstruction still existing.

The early report of this case shows, that some relief had been given to the dysmenorrhœal symptoms by the introduction of bougies, although there was little reason to suppose that the dilatation thus produced was anything beyond a mere temporary character. That uterine and ovarian irritation had been set up by the constantly recurring periods of suffering is shown by the pain being even more severe during the last two days of the period than that which came on previously, and also by the clotted state of the catamenial discharge mixed with fibrinous exsudations.

The ulceration which had existed and been cured was probably owing to that state of congestion and swelling in which the os uteri is usually observed under such circumstances; it was still swollen and red, with a slight ulceration at the left edge of it, and I applied the nitrate of silver as a temporary remedy until she could have what I considered to be the original cause removed by dividing the anterior lip.

The day she selected for the operation was nearer to the next catamenial period than she at that time supposed, and it is to this circumstance that I attribute the rather unusual amount of blood (for this operation) which was lost. Her recovery was not so speedy as is usually seen in these cases, having been attacked by influenza of a rather severe character.

Although the tent was retained in the canal of the cervix for a fortnight, I am inclined to suspect that the wound had not quite healed at the time of removing it, and that a degree of contraction was produced during its further cicatrization. It would have been, perhaps, no more than a wise precaution to have examined the part with a speculum before she left London. Whether the pain which she suffered during her next period was the precursory pain from obstruction to the discharge, or from the irritability of the uterus at these times, is not sufficiently noted to enable me to judge; at any rate, she entirely lost the bearing down pain which had hitherto accompanied these periods, and I think that this may be considered as a proof that no accumulation of menstrual fluid had taken place in the uterus.

MALIGNANT TUMOUR IN THE HEAD,

TERMINATING IN SUDDEN DEATH.

By FREDERICK ROBINSON, M.D.,
Assistant-Surgeon 74th Highlanders.

Private James Morrison, aged 29, a Scotchman, labourer, service ten years, none of which passed abroad, was admitted into the hospital of the depôt 74th Highlanders on May 8, 1851. He complained of severe constant pain at the back and base of the cranium, together with vertigo, which symptoms appeared by his account to have come on gradually several weeks ago. Both eyes have a strong squint in the same direction, an affection apparently supervening on the other symptoms. Tongue protruded to the left side. No numbness of any part of the body or extremities, or abnormal sensation. Does not appear to walk with firmness, although no diminution of power is complained of. Speech somewhat slow, and articulation not very clear, but this would seem to have always in some degree existed. Is a thin, spare man, of sanguine temperament, and somewhat addicted to intemperance; up to a recent period, however, he had always enjoyed good health.

Has never received any injury to the head or spine. Functions tolerably good; tongue clean; pulse quiet, regular, and rather feeble.

Nothing abnormal detected on examining the thoracic and abdominal viscera. The treatment consisted of purgatives, followed by three grains of calomel and a quarter of a grain of opium every night; also a blister to the seat of pain, and a nutritious, but light diet.

Four days subsequent to admission, his gums became slightly affected, and amendment commenced in all the symptoms. A gentle ptyalism was kept up. He continued to progress favourably, and was discharged on the 27th inst., only complaining then of slight debility. The pain in the head had quite gone, but the strabismus was still very perceptible. Pupils somewhat dilated.

June 14th.—Re-admitted, complaining of a recurrence of all the preceding symptoms with much greater severity, commencing gradually soon after his discharge from hospital. Is unable to stand steadily, but denies the existence of numbness anywhere. He thinks, however, he has not so much power in the right arm and shoulder as the left. Speech much slower and less distinct than on his previous admission. Countenance vacant, and somewhat listless. Pulse slow, and a little laboured. Functions tolerably well performed, except the rest, which is impaired.

The same treatment was adopted as on his former admission.

The reports did not state any material change to have taken place until the 23rd, when the gums became slightly affected. The pain in the head and vertigo were both less severe, but there appeared to be increasing debility, evinced by a very tottering "gait." On the 27th, it is noted that the pain is more complained of at the occipito-atlantoid articulation; also some slight numbness and coldness of the right arm; strabismus of both eyes very apparent. The head is somewhat bent forward, and the chin drawn down; the muscles of the neck rigid, and any attempt to turn the head from side to side, or flex it forward, causes a dull pain at the seat referred to. The symptoms continued unchanged, if anything increasing in severity, and on July 3rd, it is reported that his rest is very disturbed, and attended with some delirium. After this date the debility rapidly increased; the speech thick and indistinct; the pain stated to be very severe; perfect inability to move the head, which is kept in the position before noticed; frequent wandering during the night. On the evening of the 10th, having sat up in the day, and not complained of being worse than usual, he lay down on the bed, appeared to fall asleep, and was discovered by the orderly quite dead. The attention of the other patients in the ward (a small one) was not attracted by any moaning or struggles before the man's decease.

The treatment consisted in keeping up slight mercurial action, repeated blistering, occasional mild purgatives (the bowels being torpid from deficient tone), and a nutritious diet, but no stimuli.

Autopsia Twelve Hours after Death.—Head.—Vessels of the brain universally congested; the structure also studded with distended capillaries. Beneath the commissure of the optic nerves, a cyst was observed, containing nearly an ounce of straw-coloured fluid. On removing the brain, an irregular lobulated, elastic tumour, of a dark grey colour externally, was found beneath the dura mater (which formed its covering), firmly attached to the bone, and occupying the foramen magnum so entirely as to prevent the passage of a quill into it without force. The diseased structure extended forward along right side of the basilar process of the occipital bone and body of the sphenoid, as far as the posterior clinoid processes of the latter bone, protruding somewhat into the right cavernous sinus, and backwards as far as the 2nd vertebra. The greatest circumference was at the foramen magnum.

The medulla oblongata, where it merged into the spinal cords, was compressed firmly by the tumour against the bony parietes, and smaller than the normal size. On dissecting the tumour out, it was found to arise from the bone, which was so friable as to admit of its structure being easily broken down by the pressure of the finger, which could even be protruded some distance into it. On examining the diseased growth internally, it was found to be of a pale, greyish colour, granular, and of a semi-gelatinous consistence, presenting to the naked eye a number of small lobules bound down by fasciculi. Maceration in water caused a flocculent precipitate. The portion of the tumour nearest the surface presented several small grape-like protuberances, some of which had a rather purple hue.

The weight of the diseased mass was nearly an ounce.

Thorax.—Lungs healthy.

Heart.—The aortic semi-lunar valves thickened at their basis by warty deposit. The viscus otherwise healthy.

Liver healthy.

Kidneys rather congested.
Other viscera healthy.

Remarks.—In this case there can be little doubt that the cause of sudden death was the pressure on the medulla by the tumour, from the head being bent backwards abruptly, and probably during sleep.

This case shows the obscurity in the symptoms, and difficulty, if not impracticability, of diagnosing the existence of tumours in the head. As far as I can judge, there was not one symptom during life that could be justly considered pathognomonic of the disease from which the man died. The patient's appearance was by no means indicative of the existence of malignant disease, generally the only clue in such cases. All the symptoms were significant of the approach of hemiplegia, arising probably from serous effusion, consequent on subacute inflammation, and either independent of, or co-existent with, softening of some portion of the structure of the cerebellum or the hemispheres. Several of the symptoms commonly observable during the progress of such diseases would appear to be induced in the present case by the effects, mechanical or otherwise, of the tumour.

1st. The obliquity of vision affecting both eyes. The pressure exercised by the morbid growth would seem to be considerable, from the very tense state of the dura mater forming its investment. The sixth pair of nerves, passing along the basilar process, after piercing the dura mater, would undoubtedly; and the third pair, where they emerge close to the posterior clinoid processes, very probably be subject to a degree of pressure likely to engender derangement of their functions.

2ndly. "As regards the protrusion of the tongue from the left side of the mouth, and the want of power to articulate distinctly." The ninth nerve of the right side, when it passed out of the anterior condyloid foramen, would be in apposition with the tumour, and liable to compression against the bony wall. Whether this compression was much greater against one side of the osseous ring could not be satisfactorily determined, but from the lobulated irregular structure of the growth it is not unlikely.

3rdly. The pain and diminution of power in the right side of the chest, arm, and shoulder, might arise from the pressure on one of the spinal accessory nerves in the same manner as in the preceding instance.

4thly. The tottering gait and debility may be fairly attributable to the wasting of the upper extremity of the spinal cord and consequent defective nutrition.

The congestion of the vessels of the brain probably arose from the pressure of the tumour on the basilar vessels.

I regret that the exact position of the nerves, with reference to the tumour, could not be well ascertained, owing to the softened state of the bone.

The foregoing remarks are, therefore, merely hypothetical, deduced from the "probable" relative position of the nerves and diseased growth.

As some apology for any errors in my views, I may at least urge the interest as well as importance to a physician of cases like the foregoing, as showing a train of symptoms usually considered pathognomonic of one disease to arise from a totally different one.

The tumour appeared to resemble most in structure the gelatiniform cancer of the French pathologists. I have, however, not yet been able to examine it microscopically. It is preserved for transmission to the Museum of the Army Medical Department at Chatham.

Kinsale Barrack.

TREATMENT OF SCALP WOUNDS.

By SAMUEL THOMSON, M.D.,
Late Assistant-Statistician to the Royal Infirmary of Edinburgh.

It is well known that even the slightest wounds of the scalp have exposed life to great danger, so that we are concerned to adopt the speediest method of curing them. I have never seen any heal in so short a time as one which, a few months ago, was inflicted on the head of an elderly lady by a fall against the sharp corner of a chimney-piece. The wound was above the left temple; it extended nearly three inches in a line towards the occiput, the lower lip of it was incurved and driven in with a mass of hair, and the bone was exposed throughout more than half the incision. I cleared all the hairs from the wound, shore the scalp to the breadth of a quarter of an inch around, and parted the adjacent hair to the right and left with a comb. Making an assistant now keep the wound accurately closed, and press forward the integuments with his flattened fingers, I applied the middle of a long double-headed roller to the opposite temple, and crossed it smoothly over the wound, so as to imitate and supply the office of the assistant's hands. After two or three turns, a pretty large compress was laid over the part, and the rest of the bandage turned in different directions till the scalp was uniformly covered and equably sustained. Every fold, as it was laid on, became instantly soaked with blood, which flowed afresh in considerable quantity from the disturbed orifices of the divided vessels; yet I feared no continuance of hæmorrhage under the restraint of such an apparatus. Everything, indeed, went on so well, that I did not disturb the dressing till exactly a week after, when I found the wound had seemingly healed by the first intention; certainly, there was no tenderness nor puffiness, but a remarkable appearance of soundness, the line of the injury being covered with a firm, dark-brown scab, so that nothing further was necessary than to lay on a piece of lint spread with calamine cerate.

I can bring no other case in defence of this treatment. I repeated it, indeed, a few weeks after, when a man had received such another wound upon a railway; but, next day, the case officially fell into the hands of another surgeon, who removed the roller, and proceeded to shaving and plastering. A single case, however, is not weak when reinforced by sound argument; and a practice which has little empirical authority justly acquires confidence under the favour of rational demonstration. For, when we consider the tractive and supporting power of a roller, which, acting over a large superficies, effects much with little force, and makes no irritating strain upon any point, the integuments being fixed by a gentle pressure against the broad and smooth surface of the skull, which no means can accomplish but a cinture of bandage, we cannot, I think, readily hesitate to abandon the razor, plaster, and suture, (which last need not be condemned here,) and place our sole dependence on the double-headed roller and compress in the closing of scalp-wounds, the retention of their edges in proximity, and the proper disposition of all parts for actions favourable to restoration.

Radcliffe, Lancashire.

OBSERVATIONS ON THE LOCAL TREATMENT OF ULCERS OF THE LEG.

By HENRY T. CHAPMAN, Esq., F.R.C.S.

In an Essay "On The Cure of Ulcers on the Leg without Confinement," published in 1848, I proposed to myself three principal objects:—1st. To place in as strong a light as possible the greater efficacy and expediency of the treatment by bandaging—which seemed to be declining in repute—than that by rest, which appeared to be once more gaining ground. 2ndly. By the suggestion of a substitute for Baynton's strapping, exempt from its inconveniences, the extension of the principle of support to cases in which it had hitherto been considered as totally inadmissible. 3rdly. The advocacy of aqueous dressings—that is to say, watery solutions and preparations—in preference to topical applications of an unctuous kind.

With the exception of a brief prefatory sketch of the nature and sources of the intractability of these ulcers, in a great measure drawn together therefrom, the following observations are supplementary to that Essay, and record the results of my subsequent experience. For many practical details, therefore, a repetition of which would have lengthened the Paper too much, I must refer the readers of the *Medical Times and Gazette* to its pages; and, for the same reason, although possessing ample vouchers for every statement advanced or comment made, cases have been introduced very sparingly.

Still maintaining that the cure is accomplished more perfectly by bandaging than by rest, my chief aim has now been to show that no one plan of treatment can be applicable to all varieties of the disease, but that our remedial measures must be selected, combined, and adapted to meet the special exigencies of each individual case. In short, our practice ought to be eclectic, and not exclusive.

RETROSPECTIVE GLANCE AT THE LOCAL TREATMENT OF ULCERS ON THE LEG.

If we look back to the past history of the local treatment of ulcers on the leg, we shall find that two tolerably distinct systems of managing them have long prevailed, the main feature of the one being rest in the horizontal position, that of the other pressure or support by bandaging. Under the first, however, up to a comparatively recent period, although the necessity of laying up the limb, in order to favour their operation, was at the same time inculcated, the surgeon's reliance seems to have been chiefly placed on the curative influence exercised on the ulcer by certain topical applications, which gradually multiplied prodigiously in number, the author of each new suggestion generally assuming to himself the merit of having discovered a method of cure superior to all others, and appropriate to all varieties of the complaint. Under the second, the dressing applied to the sore was regarded as a point of little or no importance, uniform compression or support of the limb, by means of one or another kind of bandage, being the leading principle on which the treatment was conducted; a practice, it was contended, not only superseding the conflicting claims of the great multiplicity of topical remedies, which proved so embarrassing under the other system, but doing away with the necessity of rest, the cure, in fact, being more permanent than when rest had been strictly enforced.

The extent to which the exaggerated and exclusive claims of topical applications had been pushed in his time, is amusingly commented upon by John Bell, in his "Principles of Surgery," Vol. I. p. 97:—"It is impossible to be serious," he writes, "while we enumerate the thousand remedies which have been applied to ulcers: not that our disappointment in removing so afflicting a complaint can be matter for ridicule, but the vain boastings of self-sufficient inventors certainly are so. Ulcers have been dressed with precipitate, calomel, alum, vitriol, zinc, verdigris, pulvis sabinæ, and other devilish drugs; they have been powdered with sugar, chalk, charcoal, assafœtida, and other innocent drugs; they have been plastered with turpentines, balsams, mel mercuriale, decoctions of walnut leaves in sugar, (which Belloste protests to be a medicine so powerful that no ulcer can resist it.) . . . . . They have been squeezed into good humour by compresses and firm bandaging, strong sticking plasters, plates of lead upon the shins, sponges, cakes of Paris plaster, &c., or bladders have been fixed about ulcers full of fixed air, carbonic air, vital air; what is there, indeed, which has not been tried?" The ridicule, be it remarked, is directed not so much against the remedies themselves, incongruous as the catalogue may appear, as against the contracted views which made each of them a hobby in turn. But that this spirit is not confined to the partisans of one system more than those of the other, nor quite extinct in our own day, we have sufficiently conclusive evidence, (without seeking further,) in the universal and indiscriminate adoption of Baynton's practice, and rejection of all other methods of treatment, for so long a period; an abuse necessarily leading to the present depreciated estimate of its real value, and re-action in favour of the old treatment by rest, or of new modes of dealing with the malady, some of which have been introduced to our notice with claims scarcely less exclusive than those animadverted upon by John Bell.

Instead of thus limiting our resources by taking up and advocating any one remedy or line of practice, to the exclusion of all others, would it not be wiser, when we have to encounter a disease so stubborn and capricious in some of its characteristics, to accept of all means of cure that may be offered, rating them at what they are found to be worth when brought to the test of experience? There are few, perhaps, of these panaceas which may not have done good service in some particular phase of the complaint; and variety in the topical applications employed has been pronounced by many of the highest practical authorities on the subject, to be an indispensable element of success in its management. It is true that the statements on this latter point are somewhat contradictory. Sir Everard Home, for instance, exhorting the young surgeon "to spare no pains in storing his mind with as extensive a stock as possible of this kind of knowledge;" while Whately and Baynton, writers, as far as ulcers on the leg are concerned, at least equally deserving our confidence, deny its necessity, appealing triumphantly in support of their opinion to the success of their several plans of treatment, in which scarcely any variety was admissible. A consideration of the various purposes sought to be accomplished by the employment of these topical remedies may tend to reconcile such discrepancies, by showing what is their true sphere of utility, and the relative position they ought to hold with regard to both rest and support. The comparative value and expediency of these two principles themselves is, however, a matter of far more essential importance; but, in order to pave the way for entering fairly into the merits of both questions, and enable us, it may be, to lay down some more definite rules of conduct, it will be necessary to inquire briefly into the nature and source of the peculiarities which render these affections so troublesome.

SOURCES OF THE INTRACTABILITY OF ULCERS ON THE LEG, COMPARED WITH THOSE OF OTHER REGIONS.

Whatever may have been their origin, however various their aspect, the one feature by which ulcers of the lower extremity are distinguished from those of other parts of the body, is an inaptitude to heal under treatment which ordinarily proves successful in suppurating surfaces occurring elsewhere. There are manifold causes of this intractability, some of them merely affecting ulcers on the leg in common with those of other regions, others which are peculiar to this locality; and more than one may be active, in different degrees of intensity, at the same time in the same individual case. The first point, therefore, to which our attention should be directed, in undertaking the management of one of these cases, is to ascertain, as nearly as we can, what is the predominating source of intractability at the time we are called upon to treat it; always bearing in mind that it is not sufficient simply to originate the reparative effort, by removing the prominent obstacle to granulation; means are still to be perseveringly employed which will sustain that process in full vigour until it terminates in sound cicatrization.

They may be classed under two heads, those which spring from constitutional, and those which depend upon local causes;(a) but we rarely find either class in operation singly; constitutional and local elements of intractability being mingled in nearly every case of chronic ulcer, the latter commonly outlasting the former, if they do not in most instances preponderate over them.

Constitutional sources of intractability comprise those morbid conditions of the system which exercise a pernicious influence over all local maladies; such as derangements of the digestive organs, of the secretory and excretory apparatus connected with them, and of the uterine functions; a feeble discharge of all the vital operations, whether it be the result of a cachectic habit of body, or of debility induced by other forms of disease; irritability of the nervous system, original or acquired: Any change, in short, which disturbs the general health, will produce a corresponding impression upon the ulcer; thus the whole of the newly organised structure in a sore just cicatrized has been known to disappear in a few hours as a consequence of diarrhœa; mental anxiety will arrest the progress of a healing ulcer, and sudden changes of the weather often affect them powerfully.

Important as it undoubtedly is, that a due allowance should be made for such impediments to healthy action, they cannot be said to bear any exclusive reference to these affections, nor are they so uniformly present as to account satisfactorily for the obstinacy which so invariably characterises ulcers on the leg. Present or absent, moreover, a very simple experiment will suffice to indicate what is the true source of their peculiar intractability, the point in which we are chiefly interested. As long as the limb is maintained in the horizontal position, no very perceptible difference can be detected between a recent ulcer of the lower extremity and one situated elsewhere. But immediately the patient stands, or allows the foot to hang down, the surface and circumference of all but the most callous of these sores present a turgid, livid aspect; a copious exudation of serous discharge takes place, and, not unfrequently, a gush of blood from the overloaded vessels occurs; let the leg be raised to its former position, and a rapid alteration for the

(a) I need scarcely remark, that this must not be confounded with the old classification of ulcers according to their local or constitutional *origin*: a ground of distinction not often practically applicable to ulcers on the leg, since the origin of one of these sores may be purely local, and its intractability may depend, in a great measure, upon constitutional causes, and *vice versâ*. In fact, between the origin of an ulcer on the leg and its cicatrization, years frequently elapse, and every source of intractability may have predominated in turn.

better is observed; the turgidity of the vessels disappears, and a hue more or less florid succeeds to the livid tint resulting from the dependent posture.

The *peculiar* intractability, then, of ulcers on the leg is clearly traceable to the dependent position of the lower extremity, which, by impeding the free return of blood in the veins, places the capillaries of the ulcer and its immediate neighbourhood, as well as the nerves associated with them in that function, in an unfavourable condition for originating and carrying on the reparative process. If the case is left to nature, the stage of inactivity hence arising may be prolonged almost indefinitely, exposing the sore, in the meantime, to morbid actions which may totally change its aspect. To the atonic character naturally impressed upon an ulcer by its locality will thus be superadded inflammatory, irritable, or callous features, which, being regarded as characteristic of distinct varieties of the complaint, have been laid hold of as grounds of classification; and, as the epithets themselves lead to practical distinctions in the treatment, they, and the classification founded upon the conditions they express, are retained by almost all writers on the subject. Inflammation, however, is not so much a distinctive feature of any one class of these sores as an accident to which they are all liable, in common with those of other regions; so that, in adopting the above arrangement in the following pages, inflammatory sores, as a class, will be omitted, and ulcers on the leg will be considered under the heads of *Indolence*, *Irritability*, and *Callousness*, with or without the complication of Varix. But the presence of the two last features must never be allowed to divert our attention from the first, since they are but of secondary importance in comparison with it; the disposition to indolence being a permanent source of intractability, upon which they are, if I may so term it, merely engrafted. To the state of the capillary circulation, therefore, we must chiefly look, not only for an explanation of the local intractability peculiar to these cases, but also for indications of the means by which it may best be overcome.

Microscopic investigations demonstrate that, during the reparative process, the capillary vessels of an ulcer, in any region, are more dilated than those of the sound parts, and that the blood circulates through them more slowly, the circulation recovering its normal velocity in proportion as the ulcer progresses towards cicatrization. A certain amount of dilatation of these vessels appears, accordingly, to be a necessary condition to the establishment of granulation; it may be for the purpose of retarding the flow of blood through them, in order to favour the deposition of new matter from that fluid,—termed by a French writer so emphatically, *la chaire coulante*; and further, probably, to facilitate the development of new capillaries, described by Mr. Liston, in his Paper "On the arrangement of the Intermediate Vessels in surfaces secreting Pus," ("Med. Chir. Trans.," Vol. XXIII.,) as projected into the new and adventitious structure from that beneath it. Unless, however, a due proportion be maintained between the vascularity and the rate of deposition in a granulating surface, that process will not long be carried on healthily.

16, Lower Seymour-street, Portman-square.

[To be continued.]

CASE OF SEVERE INJURY TO THE HEAD,

NOT IMMEDIATELY FATAL.

By W. R. WARWICK, Esq., M.R.S.C., Etc.

The following case is important in a medico-legal point of view, as illustrating the fact, that some very severe injuries of the head are not necessarily immediately fatal. It is an addition to the cases on record, which show that persons may walk about and commit other acts, after suffering injuries that we might be inclined to suppose would prove instantaneously mortal. The recollection of such cases is of consequence, lest the medical witness should be betrayed into an opinion, that acts which have evidently been done after the infliction of an injury must have been done by a second person, against whom a suspicion might thus be raised of having been criminally concerned in the matter.

Late in the evening of the 26th December last, I was requested to visit the body of Mr. J. B., who had gone out shooting in the morning, but not having returned as night was closing in, was sought for, and found lying dead on the face in a field. He was placed on a shutter and carried to a brother's house, which was near. I found the face covered with a pocket-handkerchief, which had been tied in a knot under the chin, and thrown over the head; the neck-cloth had been removed, placed round the back of the head, and tied under the chin. On removing these, a hole in the skull, through which I could introduce the tips of three or four fingers, was exposed just above the right orbit, and blood and portions of brain escaped. The clothes, from the waist downwards, and boots, were soaked with water, as well as the lower part of the coat sleeves. There were no marks of any other injury.

On visiting the scene of the accident the next morning, there was evidence to show that the poor fellow had been wandering about there; had opened a gate into a field leading to his brother's house; had leaned upon the gate; had been through a pond which was near, and at three several places in the bank had apparently tried to get out. From the least steep place of the three spots of blood could be traced to where the body was found, at a distance of about a hundred yards from the pond, and in the direction of his brother's house. His hat was found near the pond, and was torn in such a manner as to show that the muzzle of the gun had been directed upwards, and that a portion only of the charge had entered the head. The right anterior lobe of the brain was the part, therefore, chiefly injured. Shots had not emerged through any other part of the skull.

Southend, Essex.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. GEORGE'S HOSPITAL.

By Dr. BARCLAY,

Medical Registrar.

ANÆMIA, ITS CAUSES AND CONSEQUENCES.

Never, probably, in the whole history of medicine, was a more pernicious doctrine promulgated than that which, under the name of the Brunonian theory, ascribed to inflammation the origin of nearly every disease, of every morbid condition found after death, and almost of every ache or pain which the patient at any time experienced; and thus substituted for the older treatment by emulsions and electuaries, one generally far more prejudicial, in which the lancet played the most active part, and was seconded by leeches, blisters, calomel, and antimony. For the credit of science, and for the well-being of mankind, it is fortunate that this practice has been abandoned, as the fallacies of the theory on which it was based have been exposed; but, unfortunately, even at the present day, there are some who rest satisfied with the expression of pain on the part of the patient as an excuse for having recourse to leeches, or even to bleeding. The quietude immediately following such a mode of treatment is taken as evidence that it was correct, and by a most fallacious mode of argument is even made to stand surety for the correctness of the diagnosis which had assigned "an inflammation" as the cause of the pain.

The unfortunate patient whose case is subjoined, must, according to this view, have had some twenty attacks of inflammation of the side during the preceding two years! a most unprecedented case to have been brought to a successful termination. Still more unaccountable, however, is the circumstance, that these repeated attacks should have passed off, and left no evidence whatever of their previous existence.

M. S., aged 23, was admitted in a state of extreme anæmia: her face perfectly white, and her lips almost colourless. Her symptoms were chiefly those of general weakness, with headache and wandering pains, attributable to the condition of the blood. The menstrual discharge was regular and normal; and when questioned as to her past history, in order to ascertain its cause, she stated that she had been attacked by pain in the right side about two years previously, for which she had been severely bled at the time, and as it had frequently recurred since then, she had been bled, she believed, not less than twenty times in all. The cicatrices at the bend of each arm bore ample testimony to the truth of her assertion. On careful examination of the chest no marked deviation from health was found; there was merely a certain amount of coarse bronchial breathing to be heard above the spine of the scapula on the right side, the respiratory murmur throughout the rest of the lung being equal and natural on both sides.

No history of symptoms indicating severe inflammation of any abdominal viscus on that side was elicited; and during her stay in the hospital her general health seemed quite good. Her pulse was quiet, and the bowels regular; tongue clean, but anæmic. She was ordered the ammonio-citrate of iron, and after a short stay left the house rid of all her minor ailments, slowly to recover the blood which had been so recklessly abstracted.

The case, it is hoped, is a rare one, and becoming from year to year more rare, as the means of diagnosis are more efficiently expounded to the student, and more practically familiar to the practitioner.

The second case here detailed, representing the more ordinary and spontaneous form of anæmia associated with derangement of the uterine functions, is chiefly interesting from the unusually severe characters of the dyspepsia which accompanied it. Constipation and dyspepsia are two conditions almost always associated more or less closely with an anæmic state; so much so, indeed, that it is often impossible to tell which was, in the order of time, primary or secondary. The circumstance, that chlorosis is peculiarly a disease of young females, and that anæmic states are not more common in males about the time of puberty than at any other period in their history, decides for us the question of its necessary dependance in these cases on disorder of the uterine functions; but it is highly probable that, in the first instance, that disorder, as well as the whole chain of sequences, have their origin in mal-nutrition generally, and quite as often in the mal-nutrition of indigestion and defective assimilation as in any other. Subsequently, the condition of the blood itself must be a great impediment to the due elimination of those secretions on which the processes of digestion and alimentation mainly depend. Thus complex are all the phenomena of disease, and nowhere do we find them having to each other only the simple relation of cause and effect.

Mary Ann W., aged 20, a servant girl, who had been in rather a hard place, was admitted with a very anemic appearance on the 19th Nov., 1851, under the care of Dr. Page. The catamenia were said to be scanty and irregular, but not entirely absent, having occurred only a week before admission. She had been more or less out of sorts for three or four months past. She complained now for more than a week of pain and giddiness in the head and noises in the ears, which were worse standing up than lying down. She had a slight cough, and the ankles often swelled towards night; The tongue was anæmic, and inclined to be œdematous; the pulse feeble and rather frequent; the bowels said to be open.

She was ordered an ounce of Griffiths's steel mixture three times a-day, and a morphia draught at night.

The bowels proved to be rather costive, and, being given some castor-oil on the 23rd, she alleged that it made her sick. This was followed by constant nausea and occasional vomiting for two or three days; and, although the bowels were subsequently freely acted on by calomel, she had still a flushed face and a quick pulse, with a hot skin, and complaining of pain and tightness across the forehead. The tongue remained clean, but was inclined to be glazed. The vomited matters were chiefly green and bilious.

An ammoniated saline draught was given in a state of effervescence, and, on the second day of the attack, a little wine. Her manner was stupid and heavy, and her nights were rather disturbed and sleepless.

The sickness continued for two or three days, not without some anxiety as to its cause; and, after the bowels had been again freely acted on, entirely subsided. Nutritive food was now again given, and the bowels were regulated by aperient medicine; and, on the 6th December, she was able to sit up—she had scarcely any headache, and was beginning to show some colour in her lips.

Quinine was ordered for her twice a-day. She went on continuously improving, and was able to leave the hospital on the 24th of December.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Feb. 7.—Medical Society of London. *Subject:*—Mr. Langley, (a) "On Blood-letting in Inflammatory Diseases." Eight o'Clock.

—— —— Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Monday, February 9.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock

Tuesday, February 10.—Royal Medical and Chirurgical Society. Half-past Eight o'Clock.

(a) The reading of Dr. Forbes Winslow's paper, announced in last week's Journal for this evening, is deferred, in consequence of the indisposition of the Author.

Tuesday, February 10.—Royal Institution. *Subject:*—Professor T. W. Jones, "On Animal Physiology." Three o'Clock.

Wednesday, February 11.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.

Thursday, February 12.—Royal Institution. *Subject:*—Rev. J. Barlow, M.A., Sec. R.I., "On the Physical Principles of the Steam-Engine." Three o'Clock.

Friday, February 13.—Royal Institution. *Subject:*—W. R. Grove, Esq.. "On the Heating Effects of Electricity and Magnetism." Half-past Eight o'Clock.

Saturday, February 14.—Medical Society of London. *Subject:*—Dr. Wagstaff, "On Topical Medication in the Treatment of the Pharyngo-Laryngeal Membrane." Eight o'Clock.

—— —— Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Medical Times & Gazette.

SATURDAY, FEBRUARY 7.

We have to apologise to many of our Subscribers for not inserting the kind letters which we have received on the occasion of the late union of the *Medical Times* and *Gazette*. However much our vanity would have been gratified at being able to make known what is thought of our Journal by the most eminent men in the Profession, we have not felt ourselves justified in thus occupying our columns. We therefore content ourselves with thanking, most warmly, those who have so kindly sought to cheer us with voices of sympathy and encouragement. They will be glad to know, that we are amply satisfied with the manner in which the *Medical Times and Gazette* has been received by the Profession at large. Its circulation has increased beyond the most sanguine predictions; and the support we have received justifies us in believing that the influence our Journal now exerts is unparalleled in the history of English medical literature. Such an influence can only be perpetuated and increased by endeavouring still further to extend the scientific value of its contents; and this shall be our constant aim. Others may believe that ribaldry and abuse will increase the value of their paper to hard working medical men, and that personal attacks are more palatable than scientific truths. This is not our creed, nor that of the Profession generally. We do not believe that any rivalry can injure our great circulation, except it be a successful competition in the wide fields of utility and progress.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

As faithful journalists, we feel bound to report at length the discussion which followed, at the last meeting of the Royal Medical and Chirurgical Society, the reading of Mr. Pollock's Paper; but, as members of the Medical Profession, we wish that it were in our power to assert, that it was a satire upon so grave and learned a body,—a joke and farce to bring the meetings into unmerited disrepute.

After a question, satisfactorily answered by Mr. Pollock, as to the names of the persons by whom the *post-mortem* examinations at St. George's Hospital had been conducted, Dr. Murphy declared, apparently with much gravity, that

the Fellows of the Society never patiently listened to obstetric questions!

To this succeeded a scene of personalities, upon which we can scarcely trust ourselves to comment.

Dr. Robert Lee, with unseemly earnestness replied to Dr. Murphy. He repeated his former statements, and expressed his belief in the accuracy of Mr. Pollock's conclusions. He then exhibited—with very questionable taste—a collection of vaginal and uterine instruments, the mere sight of which seemed to fill the Society with astonishment and disgust. We refer, however, to our report; and meanwhile would ask, is the Royal Medical and Chirurgical Society to be converted into an arena for squabblings and personalities? If the os uteri be so often the seat of disease, we demand, instead of our time being occupied by puerilities such as these, to be shown where it is that these ulcers, of which we hear so much and see so little, can be exhibited. If the mucous membrane be destroyed by ulceration during life, it will not re-form after death; and we shall find upon the os tincæ marks which are not, like those in living tissues, liable to be mistaken. But a discussion founded upon laborious investigations and patient inquiry, seems to be scouted. Dr. Murphy appears to scorn *post-mortem* observations, and to prefer the living female for his theme. He mistrusts statistics,—they declare against him; he prefers to use his speculum, and quibble with Dr. Lee, who, nothing loth, deals out satire in reply. Discussions such as took place at the last meeting in Berners-street, are more fitting for some College debating club than the hall of the first medical society in the kingdom.

Entirely disapproving of the manner in which Dr. Robert Lee delivers his opinions, we agree with him in the substance of what he says. Ulcerations of the os uteri are very rare. For what purpose the speculum is so often introduced we shall not stoop to inquire. How women can be weak enough, or nasty enough, to submit to such usages, for the most trivial affections, is more the affair of their husbands and their fathers than of ours; but we do most unhesitatingly condemn, and that, too, in no measured language, the conduct of those practitioners who, leading their patients into a condition of moral indecency, upon the sole excuse that they are curing a certain definite disease, neglect both the only means of determining whether such a disease exists at all, and the statistical data which alone can prove its relative frequency.

NAVAL ASSISTANT-SURGEONS.

As the cause of the Assistant-Surgeons of the Navy sustained a consistent and unflinching support from the *Medical Gazette*, as well as from the *Medical Times*, long before the union of these Journals was contemplated, so shall we, in our more extended Editorial capacity in the joint Journal, continue to watch with a jealous eye whatever affects, in any degree, the rights and proper position of those officers, as well as those of the other departments of the Naval medical service.

The victory gained for the Assistant-Surgeons by Captain Boldero, on the 8th of April, 1850, was well fought and well won. But our readers will remember, that in the *Medical Times* we never considered that the Admiralty Minute of July 17, 1850, which sprung out of the resolution of the House, could by any possibility meet the actual requirements of the case. That resolution enunciated, in so many words, "That the accommodation provided for the Assistant-Surgeons on board Her Majesty's ships of war is inadequate, and insufficient for securing the full benefit of their professional service."

The object of that resolution was clearly to make sufficient that which was insufficient. And how did the Admiralty proceed to carry it into effect? An order was issued, leaving the *accommodation*, which occupies so prominent a place in the resolution, entirely at the mercy of commanding officers. The result has been exactly as we prognosticated,—incessant jarrings, jealousies, ill-feeling, and not a little unfair play, discreditable to a service which, by courtesy, is allowed no inconsiderable share of generous, if not of chivalrous spirit among its members.

Unfortunately, there is proof, but too abundant during the last eighteen months, that our anticipations have been more than realised. The recent outrageous conduct of the Commander-in-Chief in the Mediterranean in unjustly depriving two medical officers of their cabins, is the latest instance which has come to our knowledge of the utter insufficiency of the Admiralty order to do justice to the resolution of Parliament. It is true that the Commander-in-Chief has either seen, or been made to see, the error of his way, and restitution of the cabins has been made to the injured officers; but who is sure, that in a similar fit of caprice, the same prank may not be again played by Sir William Parker, or by any other officer entrusted with like powers, so long as the rule for the accommodation of Assistant-Surgeons is allowed to remain in its present vague and indefinite state?

The remedy for this improper condition of things is manifest; and, unless it be applied in time by the Admiralty, Parliament must doubtless interpose its authority, to see that a resolution of its House is respected.

We speak advisedly, when we say, that nothing short of the immediate admission of the Assistant-Surgeon into the ward-room, with concomitant privileges, will ever satisfy the Profession; and unless the Profession be satisfied with the Service, first-class men will not be found to enter it.

The Romans held it a maxim, that their legions should be in efficient war condition equally in times of peace as during war. War with us may not be far distant; and to England's right arm will the country mainly look for security.

It will necessarily become a question, and an important one too, how far we are prepared to meet war and its emergencies. It will be asked, Have the Admiralty sought and obtained the best medical skill to aid the defenders of our country? Have they done all that the Army and East India Company have done, to procure for the Naval Service medical men of the highest acquirements?

These, and some other significant questions, will, we understand, be put during the present session, to such of the Admiralty Lords as may occupy seats in Parliament.

Our medical brethren at Greenwich have already pointed out to the candidates for the next representation of that borough, how deeply they are interested in the cause of the Naval Assistant-Surgeons. And we cannot too strenuously impress upon the medical electors throughout the kingdom, how desirable it is that they should follow so worthy an example, by urging upon their representatives in Parliament the necessity of giving a cordial and warm support to those reforms which the present state of the Naval Medical Service so cogently demands.

THE COLLEGE CHARTER.

The Medical Society of Sunderland have addressed the following Memorial to the Governor:—

"Showeth,—That your Memorialists are dissatisfied with

the Draft Supplemental Charter of the Royal College of Surgeons of England, inasmuch as it does not define the mode of voting in the election of the Council of the said College.

"Your Memorialists are of opinion that, were so important a subject left undecided by the Charter, and personal voting in London required by a subsequent by-law, such a regulation would be a virtual disfranchisement of a very large majority of the provincial Fellows, whose avocations and distant residences would often prevent their attendance in London to record their votes personally. Your Memorialists, therefore, respectfully beg that you will direct a clause to be inserted in the Supplemental Charter of the Royal College of Surgeons of England, conferring upon Fellows of the said College residing more than five miles from the General Post Office, London, the privilege of voting by marked lists transmitted by post to the Secretary of the College, as conceded by sect. 10 of the resolutions submitted to you in April, 1850, and bearing date the 23rd of that month.

"The resolution to which your Memorialists refer is expressed as follows:—'That the voting for the election of Fellows into the Council shall be by marked lists, and every Fellow shall be at liberty personally to deliver in at the meeting appointed for the election the list of candidates forwarded to him, as before directed, or transmit such list to the Secretary, provided the same, if transmitted, shall be received by the Secretary two clear days before the day of election.' Your Memorialists beg also respectfully to call attention to Clause IV., which refers to the election of members of the said College to the Fellowship: providing that members of fifteen years' standing shall be eligible for election on the production of certificates of moral character, and the payment of fifteen guineas as well as the Stamp-duty. Your Memorialists consider the payment thus demanded as unbecoming on the part of the College, giving its proceedings a mercenary character, and as unjust towards the great body of its members, inasmuch as the Fellowship has already been granted to some of its members with no superior claims, without any payment. They draw attention to the subject, not as a pecuniary one, but because they feel a Fellowship thus purchased must ever be an empty and unenviable title, and can never be held with satisfaction, as the circumstances under which it is procured must be notorious to the Profession at large.

"Your Memorialists would suggest, therefore, as an amendment on the Clause, that any member of fifteen years' standing, giving in certificates of moral conduct, procuring the suffrages of ten members, and paying the amount of stamp-duty on the diploma, shall be eligible to the Fellowship. They conceive that, by such or some similar process, the College would be rid of the charge of injustice to its members, or of mercenary motives, while, on the other hand, the Fellows thus elected would hold the diploma thus conferred by the suffrages of the Profession with those feelings of satisfaction which such a document should ever afford, and with none of the obloquy which a purchased diploma could not fail to convey. Your Memorialists beg also respectfully to state, that there are, moreover, other considerations connected with the establishment of the Fellowship as operating on the Members generally. They would point to the fact, that when their diplomas were granted, each took the highest which the then existing regulations of the College held out to him; the introduction (by its late Charter) of a new order in the College has resulted in forcing these members who expected to hold, and, for the time, did hold, the first rank in the profession, into a secondary position, and that, too, without any dereliction on their part, or any sufficient pre-eminence on that of those who have been thus raised above them. This they conceive to be an injustice to the great body of members, and they consequently hope, that, in legislating for them, some way will be opened to them by which they may still be enabled to occupy a position which they conceive to be their right, and, moreover, one which they may enter with credit to themselves. This they imagine can only be effected by such changes in the clause referred to as have been suggested above."

REVIEWS.

A Sketch of Madeira; containing Information for the Traveller, or Invalid Visiter. By Edward Vernon Harcourt, Esq. Pp. 176. London: J. Murray.

This little work will be found of considerable service to those proposing to pay a visit to the beautiful island of Madeira. It makes no pretensions to literary excellence, and contains no glowing account of lovely scenes and luxurious climate, but real practical information. Mr. Harcourt has divided his book into six chapters. The first contains a brief description of Madeira; in the second he tells his reader all that it is essential for him to know about passports, means and cost of conveyance, lodgings, servants, money, and such like matters; the third chapter is on the climates and vital statistics of the island; the fourth on its history, government, and manners; the fifth on its agriculture, and the sixth on its natural history and geology. The reader will, from the following extract, see the kind of practical information given by Mr. Harcourt.

"Lodgings in Madeira are plentiful and good. For a family, the most comfortable plan is to take a *Quinta*, that is to say, a house with a garden, standing in the suburbs of the town. The price asked for the season of six months, varies according to their size, from 50*l.* to 200*l.* In such cases the tenant is supplied with everything but plate and house linen. For single persons the boarding-houses are least troublesome, as well as most economical; a bed-room, sitting-room, attendance, and board, are obtained there for fifty dollars, or 10*l.* 8s. 4d. a month. These houses are conducted on a liberal scale, and every English comfort provided." In addition to a general hospital, into which about 700 patients are admitted annually, there is a 'lazar hospital, for the reception of persons afflicted with elephantiasis.' "

Mr. Harcourt says, it is doubtful if a person suffering from this disease ever recovered. The following statistical information is of considerable interest:—

"In the beginning of the year 1847, there were 26 patients in this hospital, 19 men and 7 women; during the same year 14 entered, of whom 5 died, and 22 men and 13 women remained;—in 1848, 8 entered, 5 men and 3 women; in which year 5 men and 2 women died, leaving 22 men and 14 women;—during the year 1849, 5 entered, 4 men and 1 woman; 7 men and 1 woman died this year, leaving 33 patients in the hospital, 19 men and 14 women."

It would seem from this, that elephantiasis is more common among men than women, and more fatal to the former in proportion to the number affected.

Medical men are expected to know something definite about Madeira,—what are the conveniences for, and what the cost of, a residence there,—and we know no book from which they will derive so much information on these matters in so small a space as the one before us.

Physiological Researches. By Sir Benjamin C. Brodie, D.C.L., F.R.S.; Corresponding Member of the Academy of Sciences of the Institute of France. Collected and republished from the "Philosophical Transactions." 8vo, pp. 146. London: Longmans. 1852.

The essays constituting the volume before us were originally published in the "Philosophical Transactions," in 1811 and 1812. They are now, for the first time, collected and republished in a convenient form.

The volume consists of four papers:—1. The Croonian Lecture, on some Physiological Researches respecting the Influence of the Brain on the Action of the Heart, and on the Generation of Heat. 2. Further Experiments and Observations on the Influence of the Brain on the Generation of Animal Heat. 3. Experiments and Observations on the Different Modes in which Death is produced by certain Vegetable Poisons. 4. Further Observations and Experiments on the Action of Poisons on the Animal System.

"I have availed myself," Sir Benjamin says, in the Advertisement, "of the opportunity thus afforded to offer, in the form of notes, some additional observations, which appear in some instances to confirm, while in others they have led me to modify, the conclusions at which I had arrived formerly."

These notes occupy nearly a third of the volume; they are distinguished by the same philosophical tone which characterises the original essays. Sir Benjamin's subsequent experience has confirmed the views he originally put forth on the relations between the generation of animal heat and the integrity of the nervous system; his facts and arguments certainly prove that animal heat cannot be due to chemical action alone.

Lectures on the Diseases of Infancy and Childhood. By CHARLES WEST, M.D., F.R.C.P., Physician to the Hospital for Sick Children, etc. etc. Second edition, enlarged. 8vo, pp. 559. London: Longmans. 1852.

We are glad to see that these most valuable Lectures are appreciated by the Profession. To the present edition a minute alphabetical index has been added, and various additions to the text been made, 50 pages of new matter having been introduced into the body of the work.

"The work now contains," says Dr. West, "the results of 610 observations and 199 *post-mortem* examinations, chiefly made among 16,276 children who came under my notice during the ten years of my connexion with the Children's Infirmary in Lambeth."

We have no doubt that the establishment of the Hospital for Sick Children, to which Dr. West has been appointed one of the physicians, will tend greatly to spread among the Profession a knowledge of the obscure diseases of infancy; and that the next edition of these Lectures—for their excellence must cause them to pass through many more—will be enriched by observations made in its wards.

Thomson's Conspectus of the British Pharmacopœias. Sixteenth Edition. Edited by E. LLOYD BIRKETT, M.D. Cantab., F.R.C.P., Physician to the City of London Hospital for Diseases of the Chest, etc. 18mo, pp. 214. London: Longmans. 1852.

This edition of "Thomson's Conspectus" contains some new matter, and the formulæ of the new Pharmacopœias are substituted for those previously given. We need not say, that this little book is one of the very best of its class; the fact that it has reached its sixteenth edition speaks for itself.

Outlines of Physiology, Anatomy, and Surgery. By WILLIAM WILKINSON, Surgeon, Private Lecturer on Medicine. 12mo. Pp. 412. Edinburgh: Maclachlan and Stewart. 1851.

THE author of this little work is well known in Edinburgh as an efficient teacher, thoroughly acquainted with all the branches of professional instruction, and his chief aim in its publication seems to have been, to aid him in his own labours. Mr. Wilkinson has divided his volume into three parts, in which are respectively considered physiology, anatomy, and surgery; while one great value appertaining to it is, that very wisely freeing himself from the trammels of a strictly methodical arrangement, the author has contrived to make the drier anatomical descriptions more readable, by introducing pathological and practical observations. Throughout, the work is well written, and the author's desire in its publication will, we have no doubt, be attained. In saying this much, however, we must express the fear, and not unfrequently it is a well-grounded one, that works of the class of Mr. Wilkinson's, have an evil tendency in leading students to rest satisfied with the amount of information they contain. This effect even Mr. Wilkinson will acknowledge as a possible one, when we remind him, it is but rarely he mentions an authority, and that on no occasion does he make a direct reference to the literature of the Profession.

PROVINCIAL CORRESPONDENCE.

IRELAND.

TRINITY COLLEGE, DUBLIN.

On the 24th current, the Very Rev. Richard MacDonnell, D.D., Senior Fellow, was sworn in as Provost of Trinity College, in conformity with the provisions of the College statutes. Dr. MacDonnell has, on several occasions during his collegiate career, given decided proofs of the possession of extremely liberal and enlightened views; and we make no doubt that the efforts being now made by the Board of Trinity College to increase the efficiency of its medical department will receive every support and encouragement at his hands. We may mention, as a very significant circumstance, that the King and Queen's College of Physicians, through its President and a Deputation of its Fellows, presented an address of congratulation to the new Provost, to which a very cordial reply was returned. This is a very unusual honour for the College of Physicians to confer on any individual, however elevated his position; and it marks, in very significant terms, the high opinion entertained by the medical faculty of the new chief of the University, and augurs favourably for the advancement of the best interests of the School of Physic in Ireland, by the cordial co-operation which may be anticipated between the two bodies who jointly preside over this educational institution.

CREATION OF A UNIVERSITY CHAIR OF SURGERY.

In furtherance of the measures which have been adopted by the Board of Trinity College for conferring a diploma in surgery on such candidates as shall complete one year in Arts, and in other respects comply with the regulations, which we have published in full in a former number, a University Professor of Surgery has been appointed to preside over the surgical interests of the Faculty, in the same way as the Regius Professor of Physic controls the medical. The University Professors of Medicine and Surgery will be thus placed on a par, the only difference being, that the latter is not entitled to the prefix of Regius; but it is, we believe, expected, that a Queen's letter will be procured, whereby the titles, as the duties actually are, may be equalised. The duties of the Professor of Surgery, like those of the Regius Professor of Physic, will embrace a general supervision of the interests of the Faculty and the examination of candidates for the diploma, but they are not directly connected with teaching either the theory or practice of surgery. It will no doubt be in the remembrance of most of our readers, that a distinct chair of surgery was created some two or three years since, to which Dr. R. W. Smith, the distinguished pathologist, was appointed,—a post which he fills with the greatest success, and which is to be regarded as the Professorship of Trinity College, while the chair just created is that of Professor to the University of Dublin. In the nomination to the chair of University Professor, the choice of the Board has fallen on Dr. James W. Cusack, surgeon to Steeven's Hospital, than whom none stands higher in the Dublin school as a judicious and scientific operative surgeon, and in every respect a sound practical man,—facts fully attested by the esteem of his professional brethren. This appointment, therefore, must confer additional weight (if any were required) on the new diploma of the Dublin University.

PROCEEDINGS UNDER THE DISPENSARY ACT (IRELAND).

The division of districts is still proceeding, but few official appointments have as yet taken place. We have before, in very forcible terms, called attention to the ruinously low scale of remuneration which has been adopted, unfortunately, in too many Unions; and we yet trust that the Commissioners will fully remedy such gross aggressions on the interests of the Profession. His brethren have much to expect at the hands of Dr. MacDonnell, and, while we admit that his position on a Board composed of such large lay elements is one of extreme difficulty, we sincerely hope he will not be found wanting in considerate attention to the pecuniary interests and welfare of the Irish country physician, and that firmness, judgment, and decision will be brought to bear against all measures which could in any way interfere with the proper and adequate adjustment of the questions which may arise between the dispensary physician and the Poor-law guardian.

PATHOLOGICAL SOCIETY OF DUBLIN.

The weekly meetings of this Society continue to produce matter of considerable scientific interest, communications being frequently made by some of the leading members of the Dublin Hospital staff. The attendance of students is very large, and, in all respects, the resolution of the Council to grant certificates for attendance on the Society's meetings to students of certain standing, who shall have attended during the required portion of the session, has been productive of the most satisfactory results. To encourage as much as possible the study of pathology, the Council has determined henceforward to grant a gold medal to the author of the best essay on some subject to be annually announced. Candidates for this medal must attend the meetings of the current session, and be entered for some of the medical courses of the year. The subject chosen for competition during the present session is, the "Pathology of the Venous System."

GENERAL CORRESPONDENCE.

MEDICAL REFORM.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have noticed with great satisfaction in your Number for January 24, that so potent a body as the Provincial Medical and Surgical Association are bestirring themselves in the matter of Medical Reform; and sincerely do I hope that the great influence which that Association wields will enable it to carry through Parliament a Bill suited to the many requirements of the Profession;

but, permit me to say, such Bill, in order to its obtaining the united support of the medical practitioners of the United Kingdom, must respect the claims of the various existing Medical Corporations. I agree most cordially and entirely with all the provisions of the proposed Bill, excepting one, (Clause XV.,) which would erect a new Examining Board, distinct from, and, so far as I can see, independent of, those of the Colleges of Physicians and Surgeons, which, as a dressing to this wound, are not to be deprived "of the privilege of conferring degrees and diplomas." Empty privilege! for I sorely fear the effect of this clause will be to cause a great disregard for the diplomas of the Colleges of Surgeons and the Apothecaries' Company. Eleven out of every twelve medical aspirants will no doubt be quite satisfied with the title and status of "Licentiate in Medicine, Surgery, and Midwifery," (Clause XIV.,) especially when, to obtain such designation, they must have undergone an examination by the Examining Board of the new Medical Council, and when the licence granted after such examination constitutes them legally-qualified practitioners. The remaining student, more ambitious than his eleven compeers, may aspire to the titles of surgeon and apothecary, in addition to the above, and present himself at Lincoln's-inn-fields or Blackfriars-bridge; but he would, no doubt, be a *rara avis* at these deserted Boards. At the risk of being deemed very presumptuous, I would venture, through your wide-spread pages, to suggest to the framers of the Bill some alteration of the clause in question. I had the honour to propose, in the *Medical Times* for Aug. 9, 1851, p. 162, a scheme of "Medical Reform," which, I humbly think, might remedy this defect, and, instead of arraying the Colleges and Halls as the opponents of the measure, (as they cannot fail to be in its present form,) would convert them into friends and allies. My plan, as there stated, is simply to combine the existing medical corporations in these islands, so as to make them all take their share in conducting the examinations of the candidates for the licence to practise. I cannot trespass upon your valuable space by being more explicit, and therefore would respectfully refer any one interested in the matter to the letter itself. I do think it is high time we were up and doing. Let our plan only be catholic, let it combine all the interests of all our medical bodies, and let us go to Parliament with the voice of a united Profession, and the year will not close before our long-sought-for Reform is obtained.

I am, Sir, &c.

Wm. Dean Fairless, M.D. and M.R.C.S. Eng.

Crieff, Perthshire.

ANEURISM OF THE AORTA.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having perused in the number of your periodical for January 24, an account of the dissection of an "Aneurism of the Aorta, with a description of the Morbid Anatomy of the Recurrent Nerve Compressed by it," I am induced, from the importance, rarity, and interest attaching to such cases, to transmit for publication the detailed account of a similar disease in a somewhat more advanced stage.

It occurred under the care of Dr. Addison, in Naaman's ward, Guy's Hospital, during the month of March, 1850. The patient was admitted on the 27th of the month, and, during the few days which he survived, the case attracted very great interest.

A robust, muscular sailor, aged 35 years, who stated that he had enjoyed until lately very good health, presented himself before Dr. Addison, labouring at the time under considerable dyspnœa. The man was too ill to admit of very minute stethoscopic examination; but Dr. Addison, after a most careful investigation of the case, gave as his diagnosis "Aneurism of the aorta, compressing the left recurrent laryngeal nerve." I believe I am correct in stating, that the peculiar vocal sounds led Dr. Addison to this conclusion, the accuracy of which the following detail of the appearances discovered by myself on dissection, most circumstantially corroborated. Certainly, this peculiarity in the vocal sounds was most remarkable. A few months before admission, the man had had an attack of apoplexy, which constitutes another interesting feature in the case.

The patient died on the 5th April, and fourteen hours afterwards I examined the body.

When the dura mater was removed, a large quantity of subarachnoid serous effusion appeared, which, as it flowed away, permitted a very deep depression to become visible in the situation of the left fissure of Sylvius. The arachnoid and pia mater of the left hemisphere being removed, a yellow, coherent substance was observable in the left fissura Sylvii, and upon the surface of the convolutions of the middle and posterior cerebral hemispheres which bound this fissure. The surface of a large portion of the "insula of Reil" was covered in a similar manner. The ganglionic elements of these convolutions upon which this yellow substance existed were, in some parts entirely, in others only partially, absorbed or destroyed. At one point the yellow substance extended into the corpus striatum, and the tissue of this ganglion was softened. In other parts the brain was healthy. The yellow substance, doubtless the remains of old effused blood, surrounded the ramifications of the left middle cerebral artery.

A large quantity of sero-sanguineous fluid, with clots of fibrin, existed in the left pleural cavity.

The surface of the left lung was covered with effused lymph of a blood-colour, and processes passed off from it to the pleura costalis. These adhesions were of recent origin. The lung itself was consolidated, infiltrated in parts with serum; its apex was suppurating, and in other parts tubercular deposits were developed. The larger bronchial tubes contained tenacious mucus.

The right lung was congested with blood, its tissue infiltrated with serum, but otherwise normal, and without tubercles. Old pleuritic adhesions existed.

The heart did not exhibit any normal appearance. At the second curve of the arch of the aorta, an aneurism was developed, the posterior parietes of the sac being completed by the remains of the bodies of the first, second, and third dorsal vertebræ, and their intervertebral cartilages. This aneurism contained old fibrinous layers, and the walls of the aorta were, both above and below it, dilated.

The left pneumogastric nerve was stretched out over this aneurismal tumour, and the recurrent laryngeal branch passed behind it in its course upwards. This last branch was at one point imbedded in the tumour. Its ultimate fibrillæ were disorganized, and I could only trace some fibre tissue connecting that portion of the nerve below with that above the aneurism. The part of the nerve above it exhibited a normal aspect.

The mucous membrane of the larynx was healthy.

The left crico-arytenoideus posticus muscle was pale in colour, small, and, in fact, atrophied,—a condition at once manifest when compared with the right, which was healthy in every point of view.

The trachea was compressed by the aneurism, and the œsophagus was firmly adherent to it.

The above facts may be verified by reference to a drawing of the parts when recently dissected, or to the preparation, both in the museum at Guy's Hospital.—I am, &c. John Birkett,

Assist.-Surgeon Guy's Hospital.

6, Wellington-street, Southwark.

MALFORMATION OF THE FEMALE ORGANS.

[To the Editor of the Medical Times and Gazette.]

Sir,—The cases of malformation of the genital organs by Mr. Curling, reminded me strongly of a case presented at this hospital about a year since, which was just the converse of those which he described and figured, the first aspect of the parts giving the idea of the female organs with a disproportionately large clitoris, while in reality the sex was male. The child which I saw was a few weeks old, and had been registered as a boy before it was brought to the Infirmary. The appearances were as follow:—On each side of the central fissure were two elongated prominences, resembling the labia majora, but broader and more rounded, especially at their lower extremities; each of these contained, towards its inferior end, a small spherical body, feeling exactly like the testicle of an infant, and these were, I doubt not, in reality testes. The two labia were separated by a considerable interval at their lower terminations, but above they united, forming a kind of arch. At this spot was placed a small body, like a large clitoris or a very diminutive penis, terminating with something very like a glans, but provided with no orifice. This organ was covered with a prepuce, not opening in the usual way, but, being slit from above downwards, thus forming two folds of membrane (labia minora), which were continued from the root of the organ just described along the floor of the fissure, gradually diminishing in size till they ended on each side of a circular orifice, placed midway between the lower ends of the labia majora. Through this opening, which was about one-tenth of an inch in diameter, all the urine was voided, and a probe could be easily passed through it into the bladder. The child was perfectly well formed, with the exception of the genital organs. I think that there can be no doubt, from the appearances presented here, that this child was a male, as the bodies felt in the labia majora could not, I think, be anything but testes. The diagnostic mark of the female, insisted on by Mr. Curling,—a passage opening inferiorly to the urethra, was also wanting. The malformation in this case may be easily accounted for, by supposing an arrest of development in a male fœtus; for,

supposing that we make the two free borders of the folds of membrane which I have termed labia minora, to coalesce from their origin at each side of the urethral orifice to their end at the extremity of the so-called clitoris, we have a complete urethra; and, again, if the so-called labia majora were united at the median line, we shall just have a complete scrotum and testicles, as in the normal condition.

Hoping that the above details may not prove uninteresting,

I am, Sir, &c. F. D. Fletcher,
House Surgeon at the Liverpool Royal Infirmary, formerly House Surgeon at University College Hospital.

Liverpool Royal Infirmary.

CASE OF POISONING BY THE CANNABIS INDICA.

[To the Editor of the Medical Times and Gazette.]

Sir,—If you consider the following worth inserting in your Journal do so. In the year 1848, while acting as surgeon to an East Indiaman in Calcutta river, I was hastily summoned one night to an adjoining ship, and from the imperfect answers of the men as to the nature of the case, supposed it cholera, as it was then raging rather freely among the shipping. However, on my arrival on board, the following scene presented itself:—The surgeon, second officer, and the Custom-house officer were in a state of narcotism from the effects of the extract of hemp, which the former had made, and persuaded the other two to take with him as an experiment, thinking to have the stimulating and exhilarating effect only of the drug; but the dose was too strong, and I learnt from the surgeon, who was the least affected of the three, that the dose to each had been about three grains of the extract, and it appeared to act according to the peculiar idiosyncracy or constitution of each. They were each in a state of collapse. The doctor, with the aid of stimulants, soon recovered sufficiently to explain how matters stood; the second officer required external as well as internal stimulants, with cold affusions; and the poor Custom-house officer, being of a weaker constitution, had nearly succumbed to the action of this powerful narcotic, and two hours had elapsed, with the aid of turpentine enema, cold ffusions, ammonia, and constant moving about, before he was out of danger and re-action thoroughly established. They all suffered from headache and lassitude the next day, otherwise no ill effects followed. It was a lesson, however, to the surgeon to be more careful in future in experimentalizing with such a powerful drug as the hemp.

Cases of poisoning with the hemp are rare, especially in this country, where the preparation is only used medicinally. The effects seem to be precisely analogous to those of opium. There was the contracted pupil, pale, clammy countenance, and the stupor, unless roused. In a medicinal point of view its action seems more violent and uncertain than that of opium, and the preparations are less to be depended upon, as sometimes I have seen it act with great violence, producing great excitement and even high delirium, and at another time the same dose would scarcely have any effect. I have given it in chronic bronchial affections and asthma with decided advantage, in doses of 10 or 15 min. of tinct. in elderly people, but do not consider it applicable where there is plethora, or in acute cases. I have likewise tried it among the natives in cholera, but, like most other remedies in that disease, with very little benefit. Great quantities are consumed by the natives under the name of gimjah and bang, which they smoke in the hubble-bubble, or among the higher classes in the hookah. It is then made into a soft mass, and mixed with other ingredients, and when smoked through rose-water the effect is exceedingly pleasant and soothing, and far preferable to tobacco, as you avoid the unpleasant odour. I am, &c. J. Gardner, M.R.C.S., L.S.A.

Southampton.

Enlargement of the spleen is common among the natives of India, and those chiefly young. If, as physiologists affirm, the spleen is a sort of diverticulum or reservoir of blood during or rather after digestion, may not the frequent cause of this disease in the natives be assigned to their taking only one meal a day, when the stomach is enormously distended. I have seen a man eat six pounds of cooked rice for dinner, and the allowance is four; this is enough to set up undue action in the former organ, and ultimately, where there is not sufficient power to counteract it, produce hypertrophy and disease. This is merely a suggestion.

CHOREA.

[To the Editor of the Medical Times and Gazette.]

Sir,—The perusal of the clinical lecture by Dr. Parkes (January 17, 1852) in the *Medical Times and Gazette*, on chorea, reminded me of a similar case, which I recollect to have attended about eighteen months ago.

The patient was a dock labourer, aged (as far as I can recollect) about 60. He had often suffered from rheumatism, for the relief of which he was in the habit of taking laudanum, as much, at one time, as ʒiiss. a-week. He had taken more or less for about five years, and at last was anxious to leave it off altogether, as he found it to injure his health. He never took intoxicating drinks. He had not taken any laudanum for about four days before the attack of chorea. On my first visit the patient was in bed lying on his back; had violent spasmodic movements of the left leg and both arms, but the left was tossed about more than the other; the head was drawn backwards to the pillow, the muscles of the face quivered violently, and the eyes opened and shut rapidly. After a momentary cessation, the strong choreic-like movements recurred, and continued about two or three minutes longer, when he was perfectly conscious. He spoke to me, complained of no pain, and protruded his tongue. The excitement occasioned by my presence and questions caused a fresh attack of the spasmodic movements like the former ones, but more violent. He again recovered for a few minutes, but soon again had another attack, and, on recovering from this, fell into a state of unconsciousness, in which he remained two hours. I did not perfectly understand the nature of the case, but administered an injection and gave antispasmodics with opium, of which, however, he was only able to take one draught. When I again saw him at the end of the two hours he was able to speak, but there appeared slight symptoms of paralysis, as indicated by the drawing of the tongue to one side when protruded. When he had answered two questions, and was endeavouring to tell me something, the violent movements returned as before, and after continuing a short time, he fell into a state of insensibility, from which he never again recovered, and died in twelve hours after. The wife told me that the first attack came on in the middle of the night, but was less severe than those I witnessed. The periods of the whole disease did not appear to extend over more than twenty-six or twenty-eight hours.

As the family were natives of Ireland, I was unable to get a *post-mortem*, and it is for this reason that I did not forward it for publication. I suspect, however, that the cause of the attack was in the head. I am, &c.

North Dispensary. Samuel Gibbons.

THE LAW OF LUNACY.

[To the Editor of the Medical Times and Gazette.]

Sir,—The legislation for criminal lunatics, promised in the coming Session of Parliament, makes all questions relating to their management of more than ordinary importance, and must excuse my wish to occupy a place in your columns with observations tending to elucidate questions whereupon I have been somewhat misunderstood.

In my recent pamphlet I have argued, that insane persons tried for the commission of offences might conveniently be classed—1st. As offenders entirely through the operation of their disease and the neglect of their guardians; and 2ndly. As persons of imbecile or partially unsound mind and of criminal disposition. The first I look upon as innocent, and would, under proper guarantees, consign to the custody of their friends, or to the ordinary public or private asylums, and to the enjoyment of all the comforts and luxuries their position and circumstances would allow. For the second class, I advocate the establishment of a Government asylum, in which, under humane but corrective discipline, their characters may be reformed or meliorated.

In the treatment of this class, I maintain that no social distinctions should be permitted, and that the imbecile or eccentric ruffian of wealth and birth must submit to have his moral distempers amended in common with the poor and lowly, who are his compeers in vice and crime. I would not "make all State lunatics paupers," but would give to rich and poor alike the best available means for reclamation in an establishment conducted on principles of a liberal economy, and in which either luxury or poverty should be unknown. Pauper is a term too frequently used in an opprobrious sense, although, under present arrangements, to the insane pauperism may be deemed a blessing rather than an additional calamity.

It is not quite clear with whom rests the originality of the idea, that criminal lunatics who possess the golden key to sympathy should be treated, not according to their merits, but to their means. It must have been on this principle that, in July last, Dr. Forbes Winslow claimed our compassion for Captain Johnston, late of the ship Tory. This gentleman, it appears, is tired of his lodgings in

Bethlem Hospital, and would prefer genteel apartments in some private asylum, or, still better, to be liberated on condition of residence abroad. It will be remembered, that, while suffering from delirium caused by drunkenness, this gentleman murdered several of his seamen in a manner so atrocious and revolting, that the annals of crime scarcely afford a parallel: when the liquor was gone, he became sane, and, on his arrival in England, he attempted to silence or dispose of the mutilated remnant of his crew by a charge of mutiny. On the plea of insanity, he had the good fortune to escape being hanged, and is now much disgusted with what I must not call punishment, but discipline and enforced sobriety, inflicted upon him under a legal fiction. We are not informed whether any proprietor of a private asylum would be ambitious of his custody, or what foreign country would deem itself honoured by his choice of it as a place of abode.

Dr. Wood, following so good an example, proposes that a State asylum for criminal lunatics should afford superior accommodation for such as can afford to pay for it; and wishes to assimilate such asylum to the Queen's prisons, where a wealthy debtor could have his day-leave, his tiger, and his tilbury, while the poor debtor languished in misery, want, and strict imprisonment.

Dr. Winslow concurs with Dr. Wood, but they neither of them inform us, whether in this State asylum it would be advisable to ground the classification of the inmates entirely upon their social rank and financial resources, or whether a more scientific classification, founded upon the mental peculiarities of the patients, should be made, and nobility, gentility, respectability, and vulgarity, be permitted to form subgenera; neither do they show by what means such a system will be prevented from encouraging intractable pride and indolence in the upper, and embittered feelings in the lower classes.

I hope to see a few details explained before such a system is adopted, and have only further to remark, that the question is not altogether a novel one, for King Lear's Fool inquires—"Pr'ythe nuncle, tell me whether a madman be a gentleman or a yeoman?"

Dr. Forbes Winslow has taken me to task (p. 116, *Psychological Journal*) for the use of the word "punishment" as applicable to any persons of unsound mind. I took some trouble to explain the sense in which I used the term, and regret that I have failed to convey my meaning to his apprehension. I regret this the more, as I find his opinions are really further advanced in this matter than my own. He says, the insane should be subjected to discipline,' to correction, to seclusion, and even to restraint: 'but the word "punishment" communicates the idea of suffering designedly inflicted, and cannot therefore refer to any part of the treatment of insanity. I confess my inexperience in the feelings produced by restraint, as I never permit its employment; but I have been informed by convalescent patients, who have undergone restraint elsewhere, that it causes very great suffering, often amounting to agony; and that the sensations produced by a strait waistcoat on an irritable patient urgently needing freedom of muscular action, resemble those which must be experienced by a chimney-sweep stuck fast in a warm flue. Chains and fetters, I am told, are much less painful if the iron is kept out of the flesh. I cannot, therefore, disconnect the idea of restraint from that of suffering designedly, needlessly, and injuriously inflicted. A man who advocates the practice of restraint is hypercritical in objecting to the word punishment. Punishment appears to be one of those terms the exact meaning of which alters with the changing opinions of mankind. "According to its primary sense, it meant vengeance or retribution; in its established modern sense it may be defined as pain inflicted with a view to prevent future wrong doing."—*Whately's Synonyms.*

I have used the term in the sense indicated in the following passage of "Simpson's Criminal Jurisprudence":—"That every human being, according to the degree of his departure, either in mind or body, from that degree of sanity necessary for the proper discharge of his social duties, is alike responsible to undergo the painful but benevolent treatment which is requisite for his cure."

However, I repent using the word, although in so doing I inflict upon myself the thing, for Bishop Taylor says, "Repentance is a penal or punitive duty."

Having now made my *amende*, let me entreat in return, that whatever terms may be employed, the management of the insane may not be painted too much *couleur de rose*; let not the public be assured that all lunatics can be entirely controlled by the judicious administration of sugar-plums, and that no painful impressions must ever be made upon them. Let some candour be used, although it may bring us down from the flights of psychology to the flat regions of common sense. I am, &c.

J. Bucknill, M.B.,
Superintendent of the Devon Lunatic Asylum.

Exminster.

SULPHURIC ACID IN DIARRHŒA.

[To the Editor of the Medical Times and Gazette.]

Sir,—As it is the particular wish of Dr. Fuller and Mr. Bristow, that the observations of the Profession should be made known on the subject of their letters, perhaps the following may be acceptable.

My attention was first called to the efficacy of sulphuric acid in diarrhœa from reading of the good effects of sulphate of soda in similar diseases. I have subsequently used it, in combination with both the sulphate of soda and the sulphate of magnesia, with the best success. The Indian formula is sulphate of soda, two drachms; water, half a pint; one ounce doses every two hours, given with an occasional opium pill once or twice daily. I have had occasion to test the efficacy of the acid in combination with roses and salts, in a case of diarrhœa following a malignant dysenteric affection occurring in my own son, aged 10. The looseness is always immediately arrested, with marked improvement of the general health.

The following cases will perhaps illustrate the effect of the sulphuric acid given in a simple diluted form:—

J. P., a farmer's servant, was attacked with fever and diarrhœa, which yielded to grain doses of calomel every two hours, with a refrigerant mixture. Subsequently to his attack, several other members of the family were affected; the type, however, becoming more decidedly typhoid in its character.

Mr. D., aged 35, had an attack of the epidemic, and as he had a great objection to medicine, the case was left to run its natural course: a strict expectancy was maintained. After about three weeks' duration of fever he had diarrhœa and sore throat, with a very slight rash of a dark rose colour. I administered sulphuric acid in his ordinary drink, which immediately relieved the diarrhœa. He was soon convalescent.

Miss D., aged 18, of leucophlegmatic temperament, another member of the same family, was affected with diarrhœa. It was some time before she sought advice. The evacuations contained water, albuminous flocculi, and some bile. Calomel, Dover's powder, chalk, with opium and salines, all failed to effect the least improvement. Dover's powder and calomel increased the urgent symptoms. She now lay in a very exhausted state, having delirium, hiccup, tracheal gurgling; tongue brown; pulse languid and intermittent. The plumbi acitas restrained the purging; the strength was gradually supported by stimuli. Opium in large doses relieved the abdominal pains, which were apparently periodic, having their accession about 4 a.m. A gradual convalescence took place, until, unfortunately, a large quantity of green preserved fruit having been introduced by a friend of the patient, she partook of it freely, which brought on accession of pain, aphtha, &c., which destroyed life. In this case the acid. sulph. dil. was tried without the least good effect: indeed, it appeared to add to the pain already existing, and was immediately discontinued.

These cases may be instructive, as showing that different means are necessary for treating diarrhœa. It will not do for Boards, whether medical or non-medical, to issue instructions for the treatment of cholera, dysentery, or diarrhœa; nothing but the adaptation of the remedy to the peculiar symptoms and constitution of the patient will avail, as the nitrous acid with opium has been fairly tried in similar cases with much benefit, having used it in the cholera epidemic of 1832, when medical inmate of Clerkenwell Workhouse, under the care of Mr. Spencer. It was introduced to us by Mr. Kis, of the Old Jewry, and has since that time been extensively used.

The Profession will not be slow to avail itself of the suggestions of Dr. Fuller and Mr. Bristow. It will, however, probably be found, that the sulphuric acid is chiefly indicated where a slight diliptheritic rash, or peculiar redness of the tongue, reveals an analogous type of fever. I am, &c.

Llansaintffraid T. Edwards, Surgeon.

THE FINAL CAUSE OF MENSTRUATION.

[To the Editor of the Medical Times and Gazette.]

Sir,—The observations which I transmitted to your Journal respecting the final cause of menstruation, have attracted more attention than I expected they would; and, independently of the communication from your correspondent "M.D.," to whom I replied in your last week's publication, that Number contained a letter from Dr. Roods, and another from "A London Surgeon," on the subject, both of which you must permit me to notice

Dr. Roods adopts the commonly received opinion, that the ovule always becomes fecundated before it leaves the ovarium; for he says he is "inclined to think that the question of fructification of the ovum has been settled before, or at the time of, the final escape of the mature ovum from the ovarium." My own belief, on the contrary, is, that it may not only be impregnated in the ovarium, or just as it is leaving its ovarian bed, but that the same may take place at any period of its transit before it arrives at the uterine cavity. Ovarian extra-uterine conception, of which I think I have seen instances, would confirm the first idea; and the observations of Mr. Newport (who has perhaps paid as much attention to the subject of impregnation, particularly in reptiles, as any one now living (a)) tend completely to bear me out in the view I take as to the possibility of conception occurring in the tube. This gentleman writes, under the recent date of January 27th, 1852, to my friend Mr. Bell, Secretary to the Royal Society, "I have reason to think, that in the mammalia the ovum continues susceptible, but with the degree of susceptibility diminishing during the whole of the time that elapses between the period of its bursting from the ovary, and entering the Fallopian tube or oviduct, to its escape into the uterus, and that it may be impregnated during any part of its transit through this tube; that it is most susceptible at the time it enters the tube, and least so when it passes from it into the uterus, at which time I believe its susceptibility to fruitful impregnation to be lost." So painstaking, accurate, and judicious an observer as Mr. Newport, would not have stated he had reason to think this, unless he had some good grounds for his belief.

Dr. Roods also embraces the old theory, that the discharge of the menstruous fluid is for the purpose of relieving the body from an excess of nutritious matter, which, if retained, would produce injurious effects in the system. He states, "the female would appear to be so constituted, as to possess a proportion of blood greater than necessary for the supply of her own individual system, so that, without periodical loss she would become morbidly plethoric; the nutrition of the impregnated ovum absorbs this redundant supply; its excretion is provided for in other circumstances." Sufficient leisure is not afforded me just now to follow Dr. Roods throughout the whole line of his ingenious arguments; I would merely ask, in the words of your other correspondent of the same date, "A London Surgeon," how it happens, that "if nature requires a safety valve (as some suppose the menstruous discharge to be) against a coming exigency in one animal, why not in another?"

And now you must let me add a few words in answer to a question put to me by the "London Surgeon." That gentleman inquires what would happen in cases of so-called vicarious menstruation. If a woman, for instance, suffering from amenorrhœa had an attack of hæmatemesis every month, should she be considered "as voiding her decidua in a wrong direction?" In such a case would an ovule part from the ovarium at the time correspondent with this attack of hæmatemesis; and would I expect to find a deciduous-like membrane, formed altogether independent of the coincident vicarious discharge?

In the first place I must distinctly state, that I do not admit of such a circumstance as vicarious menstruation. I know that it is by no means very uncommon for an amennorrhœal woman to be subject to discharges of blood from different organs, occasionally, indeed, observing something like a periodical return; but I cannot acknowledge this to be at all analogous to the menstrual function. I have two women—out-patients at the London Hospital—under my care at this time, one of whom has not menstruated for two, and the other for three years; and they are both the subjects of discharges of blood from the stomach by vomiting; the one almost daily, the other at longer intervals, though it does not recur at any regular period. Whether the condition of the stomach that leads to this loss is the cause of the imperfect action going on in the uterine system, or whether derangement of the ovaria, thence transferred to the uterus, occasions the exudation of blood from the inner membrane of the stomach, are questions which I confess my inability to answer; but this I can say, that I never saw, in any case of amenorrhœa, discharges of blood take place from any part of the body, with the periodical exactitude which characterizes healthy menstruation.

I should certainly in no instance expect to find a deciduous-like membrane formed in the uterus, independent of the coincident vicarious discharge; nor do I think an ovule would separate from the ovarium in any case where the menses do not appear, unless that discharge was interrupted by pregnancy, and thus, as it were, superseded; because, since I look upon the menstruous action as announcing the departure of a ripe ovule from the ovarium, if that announcement is not made, either there is no ovule eliminated in the Graafian vesicle, or it remains, from some cause or other, quiescently floating in the fluid that surrounds it. I am persuaded, that no woman is susceptible of impregnation so long as she remains the subject of amenorrhœa; for the very fact of the menstruous discharge not appearing is, in my mind, a positive proof that there is no ovule in a condition to receive the stimulus of impregnation.

The development of the ovule, indeed, within the Graafian vesicle may have been retarded, interrupted, or suspended for some time, either by the general bad health of the patient, or some functional and temporary derangement of the ovary, during which time no menstrual fluid would be formed, as the ovule would not burst from its bed. Just, however, as a return to healthy action has taken place, after the ovule has arrived at sufficient perfection to render it susceptible to the impress of the spermatozoa, impregnation may be effected, the fluid that would otherwise escape as "the menses" would be retained to be converted into the deciduous membrane, and the woman would conceive without previously becoming again the subject of the menstruous discharge.

The same thing occurs during suckling. A woman will not menstruate while nursing an infant at the breast (provided she does not exceed the normal period), because no ovule is perfected, while the mammary glands continue to furnish milk. For Nature, in her beneficence, will not deprive the young child of its suitable sustenance, nor permit the constitution of the woman to be subjected to the double drain of sustaining one being at the breast and nourishing another at the same time within her womb. She, therefore, as the general rule, prevents the possibility of impregnation, by preventing the elimination of the ovule; consequently, as no ovule escapes from the ovarium, no menstruous fluid is formed. When a woman does not menstruate during suckling, she is not susceptible of impregnation; but where, as in some exceptional cases, the menstruous discharge appears, she is as liable to become impregnated, *cæteris paribus*, as if she were not nursing.

I am, &c. FRANCIS H. RAMSBOTHAM.

11, New Broad-street and 7, Portman-square.

[To the Editor of the Medical Times and Gazette.]

SIR,—I feel disappointed, perhaps unreasonably so, by Dr Ramsbotham's answers to my questions, contained in a former number of your Journal; for what could be expected on a subject so obscure? I thought it likely that he would bring forward some interesting facts, of however trivial a nature, culled from his observations during a long and distinguished career as an accoucheur, to support his hypothesis. A case of undoubted pregnancy, in which there has been a total absence of the menses for now eleven monthly periods, caused me to read and study his paper with avidity. I looked forward to your last Number with considerable interest. I perceive, however, to use a remark of a "London Surgeon," that his suggestion is nothing more than "a vague and inconclusive theory," which must stand over for proof until some lucky circumstance gives an opportunity of deciding where impregnation really does take place, in ovaries or Fallopian tubes; by the seminal fluid itself, or the fabulous "aura seminalis." It is a great pity the Doctor can give no support to his suggestion (which is really very beautiful) beyond Dr. Letheby's solitary case.

I cannot, however, coincide with him when he says, that the use of the menstrual fluid is to form a deciduous membrane, as in the next sentence he sees no reason why the uterus cannot, at any time when it is vivified, eliminate one without the assistance of that secretion. If it has the power of superseding that discharge in its functions, why should woman be afflicted with such a periodical nuisance?

Dr. Rood's paper throws no more light on the subject than what has shone on it for half a century. It is indeed a subject of great interest and importance, and well deserves laborious research.

I am, &c. M. D.

LARGE DOSES OF ARSENIC.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your correspondent "Devizes" appears somewhat sarcastically sceptical as to the possibility of a child 5 years of age chewing a slice of bread and butter with which 15 grains of arsenic had been previously mixed, and recovering after symptoms of poisoning had made their appearance; and asks whether any other instance of the kind is on record? I confess I cannot mention an instance exactly parallel in respect of age, but a case in all other respects similar has occurred to me. I must premise, that I quote

(a) See his masterly paper in the "Philosophical Transactions," Part I., 1851, Pp. 169 to 242.

from memory, not having preserved notes of the case; but I have a tolerably clear recollection of the facts. During the spring of 1840, I was sent for (in the absence of Mr. Wallace, of the Hackney-road) to see the wife of a waiter, who had taken, mixed with butter, and then enclosed in a roll of bread, "half an ounce of arsenic." (I ascertained where the arsenic had been procured.) The arsenic had been taken some time before I saw her. She complained of great pain at the stomach. Two scruples of sulphate of zinc were given, and a great quantity of semi-digested bread, mixed with fatty matter, ejected from the stomach. This, upon being analysed, was found to contain a large quantity of arsenic. The patient, three days afterwards, did not appear at all the worse for either arsenic or emetic. I am not quite certain whether it was Dr. Gavin or some other surgeon in the Hackney-road who assisted me in the treatment. In the case of the child alluded to by "Devizes," medical assistance would, no doubt, be procured without delay; and in this, as in my own case, the fact of the arsenic having been previously mixed with a fatty matter would no doubt, for some time, protect the coats of the stomach from injury, and would also render its removal by emetics, &c., more complete,—the finer particles of the arsenic not having as yet come into contact with the mucous membrane of the stomach, to which experience proves they adhere so firmly when the arsenic has been taken mixed only with water, or in the form of powder.

"Devizes" not having thought proper to publish his name, I, of course, do not wish mine to appear. I enclose my card, and am,

Sir, &c. COSMOPOLITE.

Rusholme.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times and Gazette.]

SIR,—In books on arithmetic, under the head of "Rule of Three," rules are laid down whereby we are to "state the question," and the solution of the question depends entirely upon the correctness of the preliminary "statement."

Now, it seems to me, that for two or three years past medical men have forgotten this principle in writing papers for, or in discussions at, the Royal Medical and Chirurgical Society, on the disputed point of "ulceration of the os and cervix uteri," and the treatment proper to cure the affections, whatever they may be in reality, which do exist at that part. I have attended all the discussions on this subject at that Society, and have thereby gained information; but I have likewise felt much distressed to find gentlemen whom I respect much, and who, I believe, state truthfully, that they do find, in numerous cases, certain appearances, which they call "ulcerations," and which they treat by means of caustic, &c., applied through a speculum, and that their patients are by this treatment relieved of much distress and pain, which previously they had to endure. When I see gentlemen pitted against each other—one denouncing the whole system, the other justifying it in his own and his friends' hands,—I am much distressed, and it does seem to me that the fault lies in the "question" not being properly "stated."

It must be perfectly clear to all accoucheurs, that cases occur occasionally before marriage, but more so after childbirth, of bearing down, with pain in the back, discharge from the vagina, debility, pain in the head, with more or less of confusion in the mind, all of which may be cured by the plan of treatment so much decried; the question, therefore, which we have to solve, is surely not whether this plan of treatment is right or wrong abstractedly, but whether it is more calculated to cure, or less calculated, than constitutional treatment, with perhaps the use of lotions applied by the patient herself.

If we could compare the two kinds of treatment, local and general, together, we should more certainly, as it seems to me, solve the question before us, than by the style of discussions which has so often occurred of late, and which will, I am satisfied, recur again and again, as long as the new practice of local treatment is blamed in the manner it has been.

What we want is an essay or two on the subject, written by some of the most eminent of that branch of the Profession, discussing it as would be done in a clinical lecture, showing why one form of treatment was applicable and another less so. Cases must be narrated in such a manner that they can be criticised by those who think differently; but it must be criticism of the cases individually, not of the practice as a whole. I see no other mode of settling the question than this, and I do entreat my professional brethren to look upon it in this light, and publish their cases at full length, with the treatment adopted, and the result.

I am, &c. M.D., F.R.M.C.S.

MONUMENT TO JENNER.

[To the Editor of the Medical Times and Gazette.]

SIR,—About two years ago, a committee of gentlemen, of which Dr. John Forbes was Chairman, and Dr. S. Scott Alison, was Secretary, met in a room in Regent-street on several occasions, with a view to obtain subscriptions for erecting a suitable monument to the memory of the illustrious Jenner. After numerous promises of support from many members of the aristocracy and medical profession, and after much zeal spent in this cause, the Committee were then informed, that it was a *sine qua non*, that a statue from the hand of Mr. Marshall should form a part of this monument. Now, as it was the intention of the Committee to appeal to every quarter of the globe, and to every class of the community for subscriptions, they were especially anxious to avoid any appearance of a job; consequently, they had determined, when the subscription list was completed, to call together the body of subscribers to say in what way the fund should be disposed of, promising, at the same time, that they, as individual subscribers, would do their utmost to advance Mr. Marshall's proposal, who claimed, and very justly, to have originated the idea of this memorial.

This decision d'd not, however, please Mr. Marshall, consequently the Committee to a man resigned. Having, Sir, placed these few facts under your notice, I would submit to your consideration, whether the honoured name of Jenner is not deserving some better and more useful monument than a statue from the chisel of Mr. Marshall. Why not endow some scholarship, or raise a fund for investigating more fully small-pox and vaccination, which would indeed confer a lasting benefit on mankind, and be a fitting memorial to that illustrious man? I am, &c.

A MEMBER OF THE FORMER COMMITTEE.

[The statements in the above letter are perfectly correct. Dr. Gregory, and other influential professional men declined to act in the matter when they found they must necessarily be yoked to Mr. Marshall's chariot. It was not seemly that they should give their money, their name, and their time, to put 2000*l.* into the pocket of a sculptor of whom they knew nothing. The appropriation of the sum collected should be decided at a large public meeting of subscribers to the Jenner monument, called by public advertisement, and presided over by some public functionary. This mode of proceeding, however, has, as we understood, been declined; and the gentlemen who are attempting to resuscitate the matter, virtually declare, that, so far as they are concerned, if there is no Mr. Marshall, there shall be no statue. Mr. Marshall probably cares no more for Jenner than he does for Julius Cæsar. With him it is a matter of business; and doubtless he would readily convert his plan of a monument to the great Vaccinator into one to the great Roman Dictator, for an adequate consideration.

The honour of erecting a monument to Jenner should be competed for by the sculptors of the world, and not made a means of testifying, with other men's cash, to private friendship or private worth. Until competition is declared to be open to all, we recommend our readers and the public generally to withhold their guineas, and to disregard the solicitations of the collector, who will probably apply for subscriptions.—ED. *Medical Times and Gazette.*]

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. HODGSON, ESQ., F.R.S., President, in the Chair.

AN ABSTRACT OF FIVE HUNDRED AND EIGHTY-THREE POST-MORTEM EXAMINATIONS OF THE UTERINE ORGANS, MADE AT ST. GEORGE'S HOSPITAL FROM 1841 TO 1850; ILLUSTRATING THE PATHOLOGY OF THE UTERUS, FALLOPIAN TUBES, OVARIES, BROAD LIGAMENTS, AND VAGINA.

By GEORGE POLLOCK.

Late Curator of the Museum, and Lecturer on Anatomy at St. George's Hospital.

The records of the "statistics" of disease, founded on accurately-recorded *post-mortem* examinations, especially of the uterine

system, is a branch of medical literature which, perhaps, of all others, has been much neglected; and the author had not met with any work in which such a record as the following, of *post-mortem* examinations of the uterine organs, can be found. The bodies of 583 women were examined in a period extending over ten years; and out of this number, 265 cases were found affected with disease in some form or another.

Fibrous Tumours.—Out of 265 cases, thirty-nine were affected by the deposit or growth of fibrous tumours in the uterus. In thirty-eight of these cases the tumours were connected with the walls of the body of the uterus, either imbedded within them, or pendulous therefrom. In the thirty-ninth case, the tumour was attached to the cervix. In twenty-one cases, the tumours were single; but in one of these instances, in which the tumour was small, and in the upper part of the body, the os was much enlarged, and in structure resembled that of the tumour. In six of the twenty-one cases, the tumours projected into the cavity of the uterus; one was very large, without a pedicle, and three were pendulous; one of which latter had so distended the uterus and vagina, that death followed sloughing of the vagina, urethra, and neck of the bladder. In eighteen cases the tumours were double or more numerous, and in five of these some of the tumours projected into the cavity. In two of these cases the tumours had escaped into the vagina, and were much ulcerated on their surfaces. In one case, a calcareous covering surrounded the tumour, and the same process of generation was observed in its interior. In one case, two tumours projected into the cavity of the peritonæum, and, connected with the uterus by thin, long pedicles, they readily moved in the abdominal cavity. In a second case, a large tumour, attached to the anterior wall, projected into and filled the pelvis. In two cases, ligature had been applied to the pedicles of tumours. In one case the patient died before the separation of the tumour; in this case there was a second tumour; in the other case there was no second tumour; the patient died of peritonitis after the separation of the tumour. The age of the youngest person in whom fibrous tumour was found was twenty-six; and this was the only case under thirty. Several were between thirty and forty; the oldest was sixty-eight. Taking the 583 cases as the guide, the average of women affected by this disease is nearly seven per cent.

Cancer.—Cancer of the uterus existed in thirty-eight cases, not, however, confined to the uterus alone, but implicating, in many instances, the adjoining parts. In twelve of these cases, "cancer" of some other viscera (not including the organs of generation) was present; and in four of these cases the breast was affected. In twenty-three of these cases, more or less ulceration existed; and in nine of them some communication had been formed, either between the uterus, bladder, vagina, and rectum. In one case, ulceration had occurred into the cavity of the peritonæum; and in a second case, the peritonæum between the bladder and rectum was nearly perforated. When cancer exists in the uterine organs, with ulceration, sudden collapse coming on, followed rapidly by death, may thus be accounted for and anticipated, especially when the disease is confined to the upper portion of the uterus. A lady was suddenly seized with pain of severe character in the region of the left groin; this continued unabated, and independent of all remedies. About the end of two months it suddenly subsided, after the discharge of pus from the vagina, but shortly recurred, and continued unrelieved. Within four months of the first symptoms she died; and only within two days of her death did alarming symptoms appear; these were chiefly of great depression. After death, a small encephaloid tumour was found in the upper part of the uterus, softened in its interior, discharging very slightly into the uterus; but the peritonæal covering was just perforated, and allowed the suppuration from the tumour to escape into the abdomen. In fifteen cases, the cancerous matter existed as tumour, without ulceration. Six of these presented all the characteristics of scirrhus; in each case there was generally more than one deposit of tumour. In one case the scirrhous deposit was infiltrated among and in the pelvic viscera. In one case, there were simply small scirrhous tubercles of the vagina in the submucous tissue; but there also existed, in this case, encephaloid disease of the liver. In six out of the fifteen cases, the form of deposit was encephaloid. Four cases were affected with encephaloid tubercles in the walls or the uterus; and, in one, the encephaloid matter was infiltrated in the substance of the uterus. In one case, the deposit was of the colloid variety. The youngest person in whom cancer of the uterus was found, was twenty-three years of age; she was also affected with cancer of the breast. A second case was twenty-seven. The oldest was sixty-two years old.

Results of Pregnancy and Abortion were observed in nineteen cases. In most of the cases of abortion the uterus was larger than usual, in some being the size of the head of a full-grown fœtus. The muscular structure, in several cases, was found much softened, flaccid, and readily lacerated; the mucous membrane often dull-coloured, congested, and even in one case gangrenous. In most cases there were traces of the adherent part of the placenta to be observed, and a shreddy appearance of the inner surface of the part corresponding to this position. In two cases abortion followed operations for strangulated hernia; in two cases erysipelas appeared the immediate exciting cause; in one case the complication of epilepsy existed; the abortion was most probably owing to diseased placenta, the latter being in the condition commonly known as hydatid placenta. In one case an encephaloid tumour appeared to be the urgent cause of abortion. In one case of cancer the fœtus had apparently been dead for some time, but was retained. In one case syphilis was the apparent cause of abortion; five cases were attacked by peritonitis, subsequent to abortion, and death ensued; four were fatal from phlebitis. In one, retroversion following delivery, the uterus became so wedged in between the rectum and bladder, that retention of urine, most extensive dilatation and inflammation of the bladder, and subsequently sloughing of the whole urethra and surrounding cellular tissue, took place and produced death.

Alterations in Structure of the uterus were observed in twelve cases,—alterations which were of a doubtful character; that is to say, with some suspicions of cancer, or dependent on external mischief. Three cases gave evidence of induration of the substance of the uterus, one being extremely hard, not enlarged in a person 64 years old. One in the body and neck was so hard, that it was cut with great difficulty; this was in a person aged 25. One in which the posterior lip only was remarkably hard. In one case the body was much enlarged, the neck elongated, and structure indurated; the neck and lips were extensively ulcerated and flocculent; in a person 26 years of age. In one case the cervix was remarkably hard, and of a dense white fibrous structure; this patient also had encephaloid disease of the breast. In three cases, the structure of the uterus was found softened,—one in a case of dropsy; another after peritonitis following removal of an ovarian cyst. In one case, obliteration of the greater part of the cavity had occurred in a person 37 years of age. The uterus was partly destroyed in one case by an abscess in the pelvis, and in another much congestion of the interior of the uterus attended an abscess in the neighbourhood.

Alterations of Form, Size, or Position of the Uterus occurred in twenty-nine cases. In three, position was altered: one was elongated, and drawn towards a hernial sac; one was anteverted, and one displaced by an ovarian tumour. In sixteen some enlargement occurred: one in the case of a girl, 17 years old, affected by chorea; one in a case of menorrhagia. In a case of phthisis, the cervix was thickened and neck elongated. The uterus was found enlarged in one case of diseased heart; in a case of scarlet fever; in one case of dropsy; one in a case of pneumonia; two in phthisis; two in fever; three were of twice their natural size; in one case the uterus was drawn upwards by a tumour, and its cavity thereby dilated. In eight cases the uterus was smaller than usual, most of them being under 20 years; one case occurred in a woman aged 64, a condition of atrophy not very rare in advanced life; in two cases extensive prolapsus had occurred.

An unusual condition of the Cavity of the Uterus, without actual Disease, occurred in six cases. Bloody fluid existed in the cavity in four cases, apparently menstrual. It has often occurred to me to examine the bodies of women reported to have commenced menstruating a day or two before death, yet no evidence of the local secretion, or symptom of its presence, was observed. In two cases coagula were found in the cavity—one in a case of cholera, one in a case of kidney disease.

Congestion of the Uterus was observed in twenty-one cases. This apparently depended on, or co-existed with, some general constitutional disturbance. The condition itself was not attended with alteration of structure, nor indication of incipient disease. In four cases, death was caused by fever; in three cases, by peritonitis; in one, it was attended with chorea; in one, by mania; in five, some disease of the brain existed; in one, disease of the heart; in one case there existed phlebitis; in three, pleuritis; in one rheumatism; and in one case pleuritis, with general congestion of all viscera. In all the cases there was some constitutional disturbance.

The Mucous Membrane of the Uterus, Cervix, and Os, and the Vagina, was observed to be diseased or altered in its condition in twenty-three cases. In fourteen, some ulceration, or an appearance resembling ulceration, of the mucous membrane, was observed. Two occurred in patients with diseased hearts; in one, the mucous membrane of the vagina was highly congested and ulcerated near the os; in the other case, the os uteri was rough and congested, the membrane very superficially ulcerated; if "ulceration" can be the term applied to this condition of the

mucous membrane. Two cases accompanied disease of the kidneys: in one, the membrane of the vagina and os was congested, and on the side of vagina and os were several aphthous ulcers; in the second, the membrane of the vagina and os was greyish and thickened, and covered with purulent secretion; on the posterior lip were two small ulcers. In a case of chronic peritonitis, the os was congested and superficially ulcerated; in the interior of the upper part of the body of the uterus, a small spot of ulceration existed in the mucous membrane. In a case of rheumatic fever, in the cavity of the uterus, there was a small ulcerated spot. One small superficial ulcer of the os occurred in a case of pneumonia. Two instances of superficial abrasion and minute ulcers of the os, occurred in fatal cases of "fever." In two cases of diseased liver, there was abrasion of the mucous membrane round the os, in one; in the other, the os was congested, and superficially ulcerated. In a case of phthisis, the follicles of the os were inflamed and ulcerated. In one case, superficial abrasion of the posterior lip, with two cicatrices of the posterior wall of the vagina, was accompanied by abscess of the pelvis. In one case, extensive ulceration of the side of the vagina, communicating with diseased bone. In nine cases, the alteration was not attended with ulceration. In one case, the mucous membrane was pulpy, after erysipelas. In three cases, it was vascular about the os, one being in a case of diseased heart, one in phthisis, and one in inflammation of the brain. In a case of diseased heart, the mucous membrane of the uterus was congested, and blood effused underneath it at the os; in another case, the membrane was covered with pus, and the sub-mucous glands enlarged—gonorrhœa was the supposed cause of the inflammation of the parts. In a case of diseased heart, the mucous membrane was covered with a white reticulated secretion. In one case, it was thickened, congested, and formed a flat, vascular prominence, in a woman 80 years old. In one case, several little pendulous mucous tumours hung from the inner surface of the neck.

Scrofula of the Uterus existed in five cases. In a girl at 16, the cavity was filled with scrofulous matter, and the lining membrane entirely destroyed; the Fallopian tubes were also distended with the same secretion; the deposit did not extend beyond the os. There were also scrofulous tubercles in the brain and lungs. The second case was associated with phthisis. The inner surface of the uterus and Fallopian tubes was ulcerated, and their cavities filled with scrofulous deposit. The third case of a girl, aged 18, had extensive deposit in the uterus and tubes; the ovaries also had deposits of scrofulous matter in them, and there was general scrofula. The fourth case occurred in a person aged 39, was of a similar nature as regards the uterus, and was attendant on phthisis. The fifth case had the deposit round the body of the uterus, not in its cavity or substance; it was also accompanied with phthisis.

Mucous Polypus was found in one case, connected to the posterior wall about half an inch within the os.

Imperforate Vagina occurred in one case. The occlusion depended on the obliteration of about an inch and a half of the vagina. The case was operated on, and died soon after the operation and evacuation of the contained fluid.

Extra-Uterine Fœtation had occurred in one instance; death followed rupture of the Fallopian tube, in which the fœtus and placenta had been contained. The tube burst into the peritonæal cavity, and extensive hæmorrhage followed. The fœtus was found in the cavity of the peritonæum.

Fistula between the Vagina and Rectum was seen in one case affected with phthisis.

Tumour of the Urethra occurred in one case. It was about the size of a hazel-nut, of a dark venous colour, apparently not cancerous, and sprung from the inner surface, close to the orifice.

The Fallopian Tubes and Broad Ligaments were affected in thirteen cases. In two instances they were bound down by adhesions. In one case, a simple fatty tumour was found in the tissue of the broad ligament. In four cases, simple serous cysts were connected with the broad ligament. The subjects, in three of these, were under 21 years of age. In one case, the extremity of the Fallopian tube was filled with pus; in another, a cyst, with pus, was situated in the cellular tissue of the tube. The Fallopian tube was obliterated at the inner extremity in one case, and at its other extremity dilated into a cyst filled with inky fluid. In another case, the extremity was dilated, and contained dark fluid; but the tube was pervious.

Tumours of the Ovaries, not Cancerous, were found in four cases. One case had a cartilaginous tumour in both ovaries. In one ovary a fibrous tumour was found; the uterus being at the same time similarly affected. In two instances calcareous masses were deposited in the ovaries.

Cancer of the Ovaries existed in eighteen instances; six were of the encephaloid variety, and solid in structure; eight were encephaloid combined with cysts. In four cases the ovaries were the seat of scirrhus. Out of eighteen cases, four were affected with cancer of the breast; in four the uterus was also affected; and in one case there was a cancerous tumour of the abdomen. In nine cases the ovaries were alone the seat of cancer. The age of the youngest affected was 22; the age of the oldest, 63.

Cysts of the Ovaries occurred in fifty-one instances. In thirty of these the cysts were of the simple serous kind; in fourteen there existed but a single cyst; in sixteen there were more than one. In seven cases the cysts were complicated with abscess; out of these, in one, there was a clear cyst of the left, and pus in a cyst of the right ovary, (after ligature of a uterine polypus.) In one the abscesses were multilocular, and on one side opened into the rectum. In one, a large cyst filled with pus occurred after phlebitis; in another, pus in a cyst attended cancerous ulceration of the uterus. In one case cysts occurred on both sides, some clear, others filled with blood, and one contained pus, (after ligature of uterine polypus.) In one case a cyst of pus and putrid lymph was complicated with fibrous tumour of the uterus. In one case both ovaria contained cysts with pus, apparently scrofulous, in a case of phthisis. In three cases "congenital cysts" were found; their contents were, fatty matter, hair, and spiculæ of bone. In five cases cysts of the ovaries contained blood; two of these cases occurred in young women who suffered from chorea. In a multilocular cyst of the ovary, cholesterine mixed with thick, tenacious fluid was found. In one case a large cyst had been removed during life; the patient did not recover from the effects of the operation. In five cases the cysts were complicated with solid matter. In one the ovaries converted into cysts had solid growths springing from their interior; the cysts communicated by a sinus to the rectum and bladder; this in a girl 16 years old. The left ovary was affected by a compound cyst, with a large proportion of solid matter, in one case, while the right was affected with a simple serous cyst. In another case the left ovary contained a large clear cyst; the right was converted into one with thick cartilaginous walls, containing calcareous matter. In one case the right ovary presented an enormous mass, partly solid, partly cystic. In one the ovary was converted into a large cyst with growths within, one of the latter being filled with pus.

Scrofula of the Ovaries was found in four instances. In one both ovaries were greatly enlarged and filled with scrofulous matter and pus; there was also scrofulous disease of the peritonæum. In the second case both ovaries were filled with scrofulous matter; there was also phthisis. In the third, the right ovary was a large thick cyst, containing scrofulous matter; the left, smaller, was similarly affected, and there was also tubercular deposit in the lungs. In the fourth case scrofulous matter was deposited in both ovaries, and there were other and general scrofulous deposits. The youngest person affected with scrofulous deposit in the ovaries was 18; the oldest, 23.

Congestion of the Ovaries was seen in seventeen cases. Three of these occurred in cases of "fever;" one in a case of chorea in a girl 15 years of age. In two cases, the veins were varicose, dilated, and congested. In two cases, extravasation of blood was observed. A clot of recently extravasated blood was found in the ovary of a woman aged 50; and spots of extravasation speckled the surface of the ovaries in a woman of 40.

Adhesions of the Ovaries were observed in thirteen cases; in two, apparently from proximity of cancer; in one, from numerous vesicles in each. The youngest case in which adhesions were found (exclusively of those associated with cancer) was 25; and in eighteen instances the respective ages were under 40. The influence of this condition of parts in the production of sterility, with many other conditions already mentioned, should indicate precaution in the use of instruments, advocated by some practitioners, to overcome the mechanical obstructions which interfere with impregnation.

Displacement of the Ovary was observed in one case; it was adherent to a hernial sac; it was observed in the sac during life, at the time of the operation for the hernia.

Atrophy of the Ovaries was observed in ten cases. In one case, 28 years of age, very little trace of the ovaries was found, in connexion with a pelvic abscess. In one case, they were absorbed by the presence of a tumour. In one case of 49 years old, and in another of 80, they were observed atrophied.

In concluding this statement of the pathological conditions of the uterine organs, the author expresses the hope that the cases have not been collected together for no useful pathological or practical end. Independent of all theory, and irrespective of any speculations, relative to the functions of these organs, to the causes of their maladies, or to the plentiful remedies proposed or adopted in these maladies, when they are supposed to exist, these cases have been examined, recorded, collected, and are now given

to the public. This method of collecting, recording, and comparing cases, can only ultimately and correctly decide questions which have too often, and more frequently of late, led to unnecessary and injurious practices. If we only refer back to these cases, and take one broad view of all the disorders found affecting the uterine system, we cannot but conclude with this firm conviction, that in almost all cases constitutional affections may be detected, not only propagating, but maintaining, local diseases and local derangements; and that our remedies, if their use is to be attended with success, or their administration founded upon pathological investigation, must be directed to the general system —cautiously, if not sparingly, and in most cases not at all, directed to the part itself.

The President having expressed his regret that so much time was generally allowed to pass away after the reading of a paper before the discussion respecting it commenced,

Mr. Haynes Walton inquired if Mr. Pollock had made all the *post-mortem* examinations himself; if he had not done so, by whom was he assisted?

Mr. Pollock explained, that his reports extended over a period of ten years. The examinations, of course, were not all made by himself; but when he stated the names of those, besides himself, by whom the autopsies were conducted, they would be at once received as a guarantee for the correctness of his report. Among them was Mr. Prescott Hewett, whose reputation stood very high, and was quite sufficient to establish a guarantee for his share of the report. Mr. Henry Lee, now assistant-surgeon to King's College Hospital, had also participated in those labours, and so also had Dr. Handfield Jones, now one of the assistant-physicians to St. George's, and who possessed a reputation that had extended over almost the whole of Europe. For nearly five years he had himself been engaged in the prosecution of these labours, part of the time as an assistant, and part as curator of the museum; so that he could testify to the fidelity of the greater portion of the reports of these autopsies. In the early part of the period, about 1841 and a little later, there was not so much accuracy used in recording these cases as there was subsequently; and, consequently, many were omitted which might have been brought forward. Mr. Prescott Hewett, when curator of the hospital museum, was the first to recommend the admirable plan of *post-mortem* examinations that had been adopted, and which formed the basis of his (Mr. Pollock's) communication.

Dr. J. A. Wilson, when Mr. Haynes Walton put his very pertinent question, was about to say that the Society might place every reliance on the facts that had been brought forward. He (Dr. Wilson) was an old frequenter of medical societies. He remembered, among others, the 'Lyceum Medicum Londinense, which used to meet in Windmill-street, where many interesting and extraordinary cases were related, which excited great astonishment, but at last something or other was generally elicited that cast doubt on all the particulars. He could aver that almost all the *post-mortem* examinations were carried on under Mr. Pollock's own eye, and that he never allowed a female subject to leave the table without previously examining the uterus and its appendages. He never neglected this, no matter what the disease was which caused death, as he could never know what he might find. The question that had been put respecting the accuracy of these cases was a very proper one; and he hoped that, now the precedent had been established, it would always be followed, and the facts in every paper fully verified.

Dr. Murphy was unwilling to speak on the present subject, because it has latterly unfortunately happened that obstetric questions or matters bearing thereupon, even in the most remote degree, have become a source of annoyance, rather than of pleasing discussion in that Society—the first Medical Society in the kingdom. The opinions and practice of the physician, and the operations and manœuvres of the surgeon are discussed and considered with impartiality and scientific acumen, and in neither instance does the debate assume the character of a personal attack; but, if obstetrics come in question, the nature of the scene is at once changed. The Society gets excited; a full attendance is the consequence of the rumours that spread of some one to be attacked, and the calm and scientific discussion suddenly assumes all the characters of an angry debate—of a personal dispute. Of this, the late discussions on the speculum, the Cæsarian section, and ovariotomy, were examples, and he (Dr. Murphy) would therefore have been glad had he been able to avoid taking part in the present discussion. But this he could not do, as this question seriously affected private character, which, as well as professional reputation, may be easily whispered away, if the charge implied in this Report have credit given it. The obstetric physician called upon to treat the diseases of the womb, is in a different position to the physician or surgeon, inasmuch as he has no witnesses to testify for him, no one to guarantee the truth of what he may assert relative to the disease which he has to treat. The physician can have many; the surgeon cannot assert that a fracture, a dislocation, or aneurism exists, when there is none, without his error being detected; but he who has to combat disease of the uterus, is the confidential attendant of his patient, and to him, and to him alone, are her sufferings made known. Were he to communicate them to another, it would be a breach of confidence, while it would be ridiculous to ask for a witness. Two opposite evils may result from this; on the other hand, the medical man may abuse the confidence he possesses, by asserting the existence of disease when there is none; by uselessly subjecting his patient to a most annoying and painful mode of treatment, or by making a disease instead of curing one; and may thus leave her in a worse condition than she was in when he was first consulted. All this may be done; and such, according to Dr. Copland, has been done in one instance, at least. But such a breach of confidence cannot be of long duration; the ill-success of the treatment, the intelligence of the patient, and the overwhelming indignation that would await such a proceeding, must arrest and correct such an abuse. On the other hand, the medical attendant may be honest; he may truly diagnose the nature of the disease, and may have recourse to the most appropriate treatment, and yet have reason painfully to feel that he has no one to testify to his right-doing. He may find himself under the influence of a rumour that he is treating diseases which have never existed; he may learn that his patient has consulted a rival, who has assured her that she had not any such disease as that for which she had been treated, and he may find that a report has been industriously circulated, "that, at a certain time and place, which shall be nameless, a lady, whose name we cannot of course mention, had been treated by a gentleman, whom prudence forbids us to name, for a disease of the womb, which a most distinguished obstetric physician declared she never had." He may even find the rumour in print, and may read the following paragraph:—"Neither in the living nor in the dead body have I ever seen ulceration of the os and cervix uteri, except of a specific character, and especially scrofulous and cancerous; but I have met with a considerable number of cases in which it had been affirmed by others to exist during life, after deliberate and repeated examinations by them with the speculum, where I ascertained that ulceration did not exist in the os and cervix uteri, nor disease of any kind. This mistake has happened, not once and to one individual, but in a number of cases and to several practitioners, who avow that they are in the daily and almost hourly use of the speculum."(a) This, to say the least of it, is not honest. If there be any foundation for such statements, let the particulars be given, —name, date, and place; or, if this cannot be done, then let there be an umpire—a third party, a man of honour, who will decide and declare who is speaking the truth. Feeling strongly convinced the bad effects of such conduct, which not only seriously injures individuals, but must also greatly damage the Profession itself, while it breaks those links of open, manly honour, which can alone bind the members of an honourable profession together; and thinking that this report tends to justify such statements, and to decide questions which have of late frequently led to unnecessary and harmful practices, he (Dr. Murphy) had felt it requisite carefully to scrutinise it, and to make some comments on it to the Society. It was sought by the report to show, that those diseases which are considered to need the use of the speculum for their diagnosis and treatment, such as ulcerations of the uterine neck, inflammations, indurations, and hypertrophy, are of very rare occurrence, are caused by some constitutional malady, and that the treatment consequently must be directed to the improvement of the general state of health exclusively, and very cautiously and sparingly, and often not at all, to the part itself. The facts upon which this proposition is based, are certain autopsies made in St. George's Hospital, without any history of the cases, without the details of the symptoms during life, or of the appearances which the parts may then have exhibited; but given as they were found in the dead-room, and apparently intended by their number, 583, to afford statistical proof that these diseases are not to be met with. The conclusion from this is, that those who assert that they occur frequently are not speaking the truth, or are unacquainted with their profession. He (Dr. Murphy) protested *in limine* against such evidence; *post-mortem* examinations, separated from the details of the disease observed during life, were not worthy of their confidence. This objection has double force as regards the disease now under their notice, as the morbid alterations of structures may absolutely be seen during life. If the changes in the lungs, brain, kidneys, or liver could thus be seen while the patient was alive, would the medical man have recourse to the dead-room, there to discover amid semi-putrid remains what the disease

(a) Lee on Speculum, p. 275.

really was? He would ask the President, as a surgeon, if he would seek in the dead-room for inflammation of the conjunctiva, or ulceration of the cornea or fauces, and then, because they were not often noticed there, even if 1000 autopsies were described, in none of which could they be discovered, would he believe that they did not exist? Nevertheless, upon such evidence as this, because they had escaped notice in the dead-room of St. George's, they were called upon to believe, that inflammation, ulceration, and induration of the neck of the womb were of rare occurrence. Women thus affected do not die from the disease. They are seldom admitted into general hospitals, and if they are received on account of other diseases which end fatally, they have meanwhile been placed in circumstances calculated more than any other to arrest the progress of the primary malady,—they are kept perfectly at rest, with disease going on in other parts of the frame, and, consequently, if they had uterine inflammation or ulceration, there probably would not remain a trace of it before death. But he had no confidence in the report, even on its own merits. It professes to give an account of all the autopsies (583) made at St. George's, from 1841 to 1850—a period of ten years. Does this agree with Dr. R. Lee's account in his paper on the Speculum in their "Transactions?" During the time Mr. Prescott Hewett was curator—six years—he examined 600 bodies; Mr. Pollock, his successor, who held office for three years, examined 300; during these nine years, 900 autopsies were made; yet it appears that, for ten years, Mr. Pollock only records 583—a difference of 317 in the mortality among women at St. George's during that time. Again, Mr. Hewett did not meet with any cases of ulceration; and Mr. Pollock only four—three strumous, and one cancerous; yet in the report before the Society, Mr. Pollock has mentioned 14 distinct cases of ulceration, neither strumous nor cancerous, as those diseases are recorded each under a separate heading. These 14 cases of ulceration are mentioned under the following table:—"Mucous membrane of uterus, cervix, os, and vagina, diseased and altered in structure," 23 cases; 14 admitted ulcerations, 9 not. Of the latter, in 1 the mucous membrane was pulpy, in 3 vascular about the os uteri, in 1 congested, in 1 covered with pus, and in 1 with a white secretion, so that of the 9, 7 showed signs of pre-existing local inflammation, requiring local treatment. The 21 cases of congestion of the uterus, it is said, apparently depended on, and consisted with, some general constitutional disturbance; the condition itself was not attended with alterations of structure, or indications of incipient disease,—that is, the congestion was caused by the accompanying disease. He regarded these cases as ambiguous, as it was quite as probable that the congestion was a trace of inflammation of the uterus arrested by the other systemic disease, as that it was induced by the general disorder. Of 16 cases of enlargement of the uterus, in one only is the cause assigned—the presence of a tumour; in 6 of the 15, the cervix was thickened and elongated. Under the title, "Alterations of structure, as of doubtful character, with some suspicion of cancer, dependent on external disease," there are 12 cases, 5 being instances of induration. As the microscope could have shown whether cancer existed, he (Dr. M.) claimed these as induration, the result of inflammation. One is thus described—"Body enlarged, neck elongated, and structure indurated, the neck and lips extensively ulcerated." There were, then, acknowledged ulcers 14; doubtful alterations of structure in the mucous membrane, 7; congestions, unexplained, 21; enlargement of the womb, etc., 15; indurations (not cancer), 5: all of which, 62 in number, he claimed as the results of inflammation. All these, then, probably required local treatment; and, in lieu of agreeing with the author, that they show that "constitutional affections propagate and maintain local diseases," he was inclined to believe that the neglect of the local malady may have induced some of the general affections, and he therefore denied that the treatment must be directed solely to the general system, although he freely acknowledged the utility of constitutional remedies. One other error requires a slight notice; the proportion is taken from the entire number, (583), whereas there was only 265 cases of uterine affections; 318 were so far healthy. As well might a report on uterine ulcers be made from the Marylebone Workhouse, and if only three or four are found in a year, that number might be stated as the amount of cases found in some thousands of females. He had thus dwelt on the errors of the Report, as statistics were so much abused. They may be made to prove anything, for few will trouble themselves to examine figures, and the deductions are credited, because they appear to be algebraically true; in this way ovariotomy, Cæsarian section, ulcerations of the cervix uteri, and other questions, have been mystified by imperfect and erroneous statistics. He had attempted to adopt this plan at University College Hospital, and had soon found its inaccuracy. The day after Dr. Lee's paper on the speculum was read there, a girl was admitted into the hospital dying from the effects of opium. At the autopsy he had examined the uterus, and found an ulcer on both lips extending into the cavity. It was seen by the pupils, and was sent to the curator to be preserved, but the next day it had lost all its characters, and was thrown aside. Being able so to arrange a patient, that nothing but the disease could be visible, he next procured the assistance of Mr. Tuson, an excellent artist and modeller, who made coloured drawings of these complaints; but, as these did not faithfully represent the disease, be, unknown to him (Dr. Murphy), made a series of beautiful models, showing every variety of these diseases, which, instead of being as 14 to 583, are more properly as 1 to 3. In concluding, Dr. Murphy apologised for the length at which he had addressed the Society; he was obliged to do so, as he wished to disabuse their minds of certain prejudices against a most valuable aid to the diagnosis and treatment of these diseases; and, in doing so, he asked of them not to confound two very different things, the use and the abuse of the speculum. Against those who were guilty of the latter, he felt the deepest indignation; they abused a trust reposed in them, violated the honour of the Profession, and disgraced their own characters as men. If there be such a being, he (Dr. Murphy) trusted he would be exposed, and that no false delicacy or feelings of prudence would prevent the Profession from expelling him from their ranks. This should be done, but let not the whisper, that such are to be found be made the means of flinging calumnies on those who are honestly following their Profession to the best of their ability.

Mr. Charles Hawkins said, that he addressed the Society with great pain and reluctance. He quite agreed with Dr. Murphy that observations and speeches had been made in that room, which tended to degrade the Profession, and he had hoped that he (Dr. Murphy) would have taken care to avoid language that might be complained of. He called upon the President to require Dr. Murphy to withdraw the charge of dishonesty he had made against Dr. R. Lee; and added, that no one could be expected to remain silent when such a charge was made against him. It would not be allowed elsewhere. (Applause.)

At the request of the President, Dr. Murphy at once expressed his regret for having used the word, as far as the Society was concerned, and, after some further parleying, he withdrew it altogether.

The time for the adjournment of the meeting having arrived, it was proposed, seconded, and carried, that the discussion be prolonged for another half hour.

Dr. Robert Lee would not refer to the observations made by Dr. Murphy, as they had been withdrawn, but would offer some remarks on Mr. Pollock's important paper, which he regarded as a most valuable contribution to the pathology of the uterine system. The paper showed that morbid alterations of structure in those organs are often found in women deceased from diseases not connected therewith, showing that in many cases organic diseases of those parts may exist, although their presence be not suspected nor discovered during life; besides which, the paper shows that many of these organic diseases have a constitutional cause, or are connected with disease in other organs, such as the head, lungs, liver, kidneys, and the breasts, and consequently could not be removed by local remedies applied to the uterus itself. In 583 *post-mortem* examinations alluded to in the paper, 40 cases of fibrous tumour of the uterus were discovered. It was by such proceedings as those recorded by Mr. Pollock, that is, by the examination of the bodies of women deceased from other than uterine disease, that the history of those uterine fibrous tumours was elicited, and brought to its present state of almost perfectness. Thus was it that their situation in the uterine walls, and their structure, with their development into polypi, and the difference between them and other non-malignant tumours, were fully made known, and by no other proceeding could that have been effected. Besides these fibrous tumours, there were thirty-eight cases of cancer uteri, the same disease existing elsewhere in twelve of these. The same result has been obtained in these cases as in the previous instance, by examining a large number of bodies of women deceased from non-uterine disease, for by this means it has been shown that inflammation is not the cause of cancer, as is still stated by many French writers; and, further, it has thus been proved that the disease may begin in any part of the lining membrane, and in the muscular or peritoneal coat, and that the glands of the os and cervix are but seldom the seat of the disease in the first instance. It has also been shown that fungoid cancer, and the cauliflower excrescence of the womb are the same disease, and that all operative proceedings to arrest their course are useless and unavailing. Thus also has it been shown, that phagedæna, or corroding ulcer, is but one of the forms of cancer, and that it is often complicated with true scirrhus or encephaloid disease, which often affects the fundus, when the os and cervix have been destroyed by phagedæna. He (Dr. Lee) demanded if any one would venture to declare that the speculum

could be of use in the discovery of either of these diseases, malignant and non-malignant, or that the application of caustic could be serviceably employed in the treatment. Of the 583 *post-mortem* examinations, twenty-three were instances of a diseased state of the lining mucous membrane of the womb; abrasion or ulceration existed in twelve of these; in two of these latter, the kidneys were, he believed, affected: in two there was diseased liver, in one diseased heart, in one pneumonia, in one chronic peritonitis, in one pelvic abscess, in one rheumatic fever, and in one common fever; so that of whole twelve cases of abrasion or ulceration, there was only one which was free from serious constitutional disease affecting some other part of the body; and even this was not altogether uncomplicated, for Mr. Pollock had informed him, (Dr. Lee,) that besides the ulceration of the os uteri, the body of the organ was extensively diseased, there not being, consequently, in all the 583 autopsies, a single case of simple ulceration of the os uteri. The application of caustic to that part could not have relieved any of the constitutional diseases by which the ulceration was complicated, nor have checked their fatal progress. These examinations at St. George's, and 2000 more at St. Marylebone Infirmary, made at his (Dr. Lee's) desire, show that this simple ulceration is very unfrequently seen in the dead body; neither in the dead nor in the living had he (Dr. Lee) seen ulceration of the os uteri, except of the specific character. This statement he deliberately repeated, nor would he withdraw or modify anything he had said respecting the speculum in his paper published in their "Transactions." Since that paper was read, in April, 1850, he had had about forty cases under his notice in private practice, in treating which the speculum and caustic had been used by other medical men for periods of from two or three months to as many years. He had notes of all these cases; the names, ages, and condition of the uterine and general systems; the dates, the duration of the treatment with the speculum and caustic, and the names of the medical men by whom they were advised and used. He had all these particulars in a tabular form, which he was ready to submit to the President and Secretaries; but the names of the patients must not transpire. The result of all this in his mind was, that the speculum threw darkness, and not light, on uterine disease. He had himself examined all these cases with and without the speculum, and could not detect any ulceration or vestige thereof on the os and cervix, except where it was the result of disorganisation, caused by potassa fusa. In some there existed fibrous tumours, which were readily discovered by the usual mode of examination; in others, leucorrhœa of long duration in strumous habits; in others, again, sterility; in many, hysteria; and in others organic disease of the ovaries. Several of these cases are noticed in the paper on Ovarian Disease, lately presented by him to the Society, and which was described as "utterly unworthy of the merest tyro." One of the patients was subjected to the use of the speculum for upwards of two years without deriving any permanent benefit from its use and the treatment that was employed. He (Dr. Lee) saw her a few months since in consultation, and was quite unable to detect any traces of ulceration or abrasion in those parts, with or without the aid of the speculum, and he felt sure that there never had been ulceration, although she had been treated for it for so long a time, her general health having greatly suffered in the meanwhile. The discharge was found to proceed from a fistula on the inner surface of one of the labia; this was laid open by an hospital surgeon, and has since healed most favourably; subsequently to which the leucorrhœa ceased, and the patient is rapidly regaining her health in the south of Europe.

Dr. Murphy here rose to order, and desired that Dr. Lee should be called upon to give the name of the medical attendant. This Dr. Lee refused to do; and the President ruled that he was in order.

This little episode having passed away,

Dr. Lee continued with the details of another case. His patient in this instance submitted to the use of the speculum and caustic for twelve months, when the engorgement and ulceration of the os were said to be cured; but the symptoms persisted. By another medical man, the employment of the speculum and caustic was resumed, and continued for several months, but without much advantage. The disease was then spoken of as retroversion; and to relieve it, "a horrible instrument with a long prong" was passed into the womb, the patient, while wearing it, being sent to a watering-place, 200 miles distant from London. Her health was in a wretched state when "this impaling machine" was removed. The existence of a constitutional cause of her ill-health was not, it appeared, even suspected. Simple ulceration of the os uteri is not the only imaginary disease of these organs respecting which so much has been said and written of late; retroversion has been much spoken of, and the uterine sound, or "poker," has been invented principally as a means of diagnosing it from fibrous or ovarian tumours. It was stated lately in that room, that he (Dr. Lee) knew nothing of this dangerous weapon; but the fact was, that he knew more about its bad results than some of them supposed. Since that statement was made, this instrument, with some other novelty, had been used on a young lady, with the most fatal results. She died from extensive peritonitis; and of that case Dr. Roe can furnish full particulars. Dr. Lee concluded his lengthened observations by drawing from a bag which he had with him a number of instruments, which he exhibited, as recent inventions for the treatment of uterine disease. Among these were, the uterometer, for dividing strictures of the cervix uteri; forceps-scissors in case; uterine support; hysterotome, for dividing the os uteri when strictured; jointed uterine double vulsellum forceps; uterine sound; one air-tractor; a set of dilators in case. Of these instruments, after showing them singly, he said the hysterotome was the most formidable. He was not aware of its existence until lately; and, as probably many of those present were equally ignorant, he would draw their attention to its construction. Its point was so made as to show that it was intended to use it to rip up the uterus where there is not any stricture. Dozens of these instruments were being sent to India to the young assistant-surgeons; but it would be better to send them to the Cape, to frighten the Caffres. It would do that much better than the rifles which are now being sent out. (Laughter.)

Dr. Henry Bennet thought it but right to bring before the Society an important paper bearing directly on the statistics referred to in Mr. Pollock's paper, so far as disease of the mucous membrane of the uterus was concerned. This paper was a letter from Mr. Holl, curator of the museum and pathologist at St. George's in 1850, and was addressed to Dr. Woolley, of Brompton. It gave an account of the results of the autopsies made by him, as regarded the condition of the mucous membrane of the uterine neck. It appeared to him (Dr. H. Bennet), that Mr. Holl's guarantee for the correctness of his opinions was all that could be desired, as he was practically acquainted with the lesions to which that part is subject in the living state, he having studied them under Dr. Woolley, the physician-accoucheur to the Brompton Dispensary. Mr. Holl had carefully examined the condition of the parts in all the females whose bodies he had examined, and in his letter he stated, "that the number of women that died in the hospital during the past year (1850) was considerably below the average, and, owing to the alterations that were being made in the dead-house, several of them were removed without examination. The whole number of bodies in which the state of the uterus was examined was 44; of these, 34 either presented no disease of the cervix uteri, or only slight congestion, with the exception of 3, in whom the congestion was considerable. Of the remaining 10 cases, 9 of them presented more or less extensive abrasion of the epithelium from around the os uteri, but no ulceration. The pelvic veins were generally full of blood; the cervix uteri large, swollen, and puffy, with more or less venous congestion of the mucous and submucous tissues, but no induration or effusion of lymph into its texture. The glands of Naboth were enlarged, and the canal of the cervix blocked up with viscid mucus. The removal of the epithelium appeared to commence at the follicles which surrounded the cervix uteri. Seven of these cases were taken from women who had arrived at or passed the middle period of life; two of them were from young women, aged respectively 15 and 21; in the former the hymen was entire. The remaining case was from a young woman, aged 22; two small sloughy ulcers existed on the posterior lip of the cervix uteri, and the mucous membrane of the vagina was thickened and inflamed, and covered with purulent secretion." Dr. Bennet, having read the letter, drew attention to the fact, that Mr. Holl, having a knowledge of these special lesions, and having specially investigated them in the autopsies, discovered 10 cases out of 44, or 37 per cent., in which there existed abrasion or ulceration of the uterine mucous membrane,—conditions which he (Dr. Bennet) considered pathologically identical; while others only met with four instances in upwards of 500 autopsies, or not 1 per cent. This last statement he supported, by saying, that as Mr. Pollock only mentioned fourteen cases of abrasion, and ten of these were met with by Mr. Holl, the number found by other pathologists was reduced to four. He could only attribute this to the fact, that the other observers, notwithstanding their high reputation as pathologists, not possessing a knowledge of the disease as it occurred in the living womb, and their attention not being specially directed to this point, must have overlooked lesions really existing; and this was often the case in morbid anatomy, minute changes of structure being discovered when sought for, but overlooked if not specially investigated. He had himself made hundreds of autopsies when *interne* in the Parisian hospitals, under Velpeau, Gendrin, Jobert de Lamballe, Prus, and others; but, as regarded disease of the mucous membrane of the os and cervix uteri, both his notes and memory were a blank, for he was then seeking for

uterine fibrous tumours, cancer, etc., and not for disease of that membrane. He did not, therefore, conclude that it did not exist, but merely that he had overlooked it, from not seeking for it. He (Dr. Bennet) had also another letter to bring before the Society from Mr. Hutchinson, of Guildford-street, with reference to the results of the autopsies at the Marylebone Infirmary, from 1832 to 1835, as regarded this disease of the uterine mucous membrane. Dr. Robert Lee, both that evening and in his paper in their "Transactions," had referred to the *post-mortem* examinations alluded to by Mr. Hutchinson, and his (Dr. Lee's) researches, according to this letter, consequently would appear not to be of the value he (Dr. Lee) attached to them. Mr. Hutchinson commenced by stating, that during his residence at the infirmary, the question, as to uterine mucous membrane disease, had not excited attention among the Profession, and he had no recollection of any pathological inquiries having been instituted into the condition of the uterus, except when it was the seat of some special disease, such as cancer, tumour, or metritis. He believed, however, that his successor, Dr. Boyd, was engaged with Dr. Lee in prosecuting such researches.

Mr. Pollock stated, in reply to the observations made by Dr. Murphy, that he could reconcile the apparent discrepancy in the numbers furnished by Mr. Hewett and himself to Dr. Robert Lee, by the fact, that as Mr. Hewett had been curator of the museum of St. George's Hospital for more than six years, he had no doubt examined, as he stated to Dr. Lee, some six hundred bodies of females during that period. Mr. Pollock was assistant-curator to Mr. Hewett for nearly three years, and subsequently curator for nearly two years, during which time he certainly had not examined less than three hundred bodies of women; but it so happened, that Mr. Hewett and he had not compared notes in giving the evidence to Dr. Lee, and probably, and most likely, each had included in their numbers many of the cases which had come under the observations of both of them, while Mr. Pollock was assistant to Mr. Hewett. With respect to the total number of Mr. Pollock's returns not amounting to the same number that had been examined at the hospital, as furnished by the evidence of Dr. Lee, Mr. Pollock had excluded many cases which, he felt sure, had been examined by Mr. Hewett, but which, not being specially noted as examined, he did not include in his return for the sake of perfect accuracy. It had always been the rule at St. George's Hospital, in examining the bodies of females, to cut open the uterus; and it had so happened, in the earlier records of *post-mortem* examinations, that frequently when the uterus was healthy, no allusion was made to its natural condition; these cases had been omitted; had they been included, the proportion of healthy cases would have been greater. With respect to Dr. Murphy's objection to the expression made use of by Mr. Pollock, in the conclusion of his paper, viz., that "he considered the result of such cases being published might check the use of improper and injurious practices," he begged Dr. Murphy to rest satisfied, that he did not point those observations at him or his practice; but, at the same time, Dr. Murphy must be aware, as well as every member of the Society, that there were injurious and improper practices, which could not be justified, and which the pathology of the uterine organs did not sanction. Dr. Murphy and many gentlemen might differ in opinion with him (Mr. Pollock) in the conclusions he had drawn; but those conclusions were the result of the cases presented to the Society, and independent of any prejudice, or the result of any practice in this department. He had considered the mass of evidence well worthy the consideration of the Society; and, though some few imperfections or mistakes may have occurred in shaping this evidence into its present form, still the chief points of the paper would be found correct, on reference to the table of cases annexed to his paper. With regard to the observations from Dr. Bennet, Mr. Pollock could only refer him to the table of cases, in which he would find copied the *post-mortem* records of every case made by the gentleman alluded to in his note. The lateness of the evening prevented Mr. Pollock from trespassing on the time of the Society, though many points remained to be commented on, which he otherwise would have been glad to have alluded to.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. Latham, President, in the Chair.

Mr. Adams exhibited also a specimen of

CHOLESTEATOMATOUS AND CYSTIC TUMOUR OF THE OVARY.

The parts were removed from the same case as the specimen of necrosis of the head of the femur, exhibited by Mr. Solly. The tumour occupied the situation of the left ovary, and had a coarsely lobulated outline, the average diameter being about three inches, or rather more. On section it resembled, in its anatomical arrangements, the ordinary compound cystic tumour of the ovary, when of small size, the cysts, however, containing a very different material to that usually met with. There was a slight peculiarity in the cysts, viz., that they appeared less compound than usual; they were more independent of each other, so as to suggest the idea of their being a cluster of solitary cysts, rather than a group originating by multiplication from a single cyst; from the internal surface of one of them, however, a flattened cluster of compound secondary cysts projected into the cavity of the parent cyst, precisely as in the ordinary compound cystic tumour, so that no difference in respect of their origin and development could be presumed. The contents of the cysts formed the only peculiarity. There were four principal cysts; one occupied the precise position of the ovary, with thick, dense parietes, and filled with a firm, waxy-looking material, loosely contained in the cyst, from which it easily shelled out entire. The surface of this waxy-looking substance had a brilliant mother-of-pearl appearance, and was smooth and even, with the exception of a few small granular elevations. A section through this spherical mass exhibited the following appearances:—The central part was of a dingy brown colour, and of cheesy consistence, homogeneous, and without a laminated arrangement; this colour ceased rather abruptly at two lines from the surface, the peripheral portion for a line in thickness, having a dead white pearly appearance; this part had also a distinctly laminated arrangement of structure, the laminæ being extremely thin, but separable readily by the point of the scalpel. The laminated arrangement, though most distinct at the circumferential portion was not confined to it, but extended through the dark-coloured part towards the centre, gradually getting less distinctly traceable as it approached this point, where it was completely lost. On a microscopical examination, the circumferential part was seen to consist of laminæ, having very much the appearance of tassellated epithelial cell-membranes, intermixed with layers of cholesterine crystals; the cells were irregular in form, generally hexagonal or polyhedral, very transparent, with a pale, delicate outline, and always without nuclei or granular contents, resembling scales therefore rather than cells; although they generally presented themselves in membrane-like masses, individual cells readily separated and presented the characters above described. The crystals were extremely abundant at and towards the circumference, but diminished rapidly towards the centre where they were absent. The cells too gradually lost their scale-like character, became more regularly spherical, and contained oil as they approached the centre; they still generally presented themselves in membrane-like masses, but individual cells separated much more readily. The surface of the separated cells frequently had a wrinkled appearance, probably from the escape of a portion of the contained oil. A second cyst of oblong form, measuring an inch and a half in its long diameter, passed directly outwards, one of its small extremities being adapted to the convex outline of the spherical cyst above described; it had thick parietes externally, and a thin membranous wall on its central aspect, and contained cholesteatomatous matter resembling in its microscopic characters that above described, but of a whitish, translucent, waxy, or spermaceti-like appearance throughout, and less regularly disposed. The dense, laminated material of mother-of-pearl lustre, above described as surrounding the spherical mass, existed here only at the small end in apposition with the spherical cyst, and along the sides to a variable extent. A third cyst of spherical form, nearly two inches in diameter, and situated laterally with respect to the two last-described cysts, was filled with a clear and slightly viscid or gelatinous fluid, such as is constantly met with in ovarian cysts; examined microscopically, this fluid was seen to contain masses of a finely granular matter mixed with spherical cells like mucous corpuscles; no crystals were seen, but only a small quantity of this fluid was examined, most of it having escaped on opening the tumour; however, the fluid contents of some of the smaller cysts, from the cluster of compound cysts, was carefully examined and presented similar appearances. The cluster of compound cysts alluded to was in apposition with this cyst, and also with a smaller one to be next described, between which it was compressed. The small cyst adverted to was of a narrow, oval form, less than an inch in its long diameter, more central in situation, and having thin membranous parietes; it was filled with a white granular fatty substance of very soft consistence, resembling that met with in the ovarian cysts which contain hair, etc. Under the microscope this substance was seen to consist of cells filled with oil; the cells were of the same size and appearance as those described in the central part of the spherical cholesteatomatous mass from the first cyst, but completely spherical, being distended with oil, and without any tendency to cohere; cells having a

slightly wrinkled appearance from the partial escape of oil were also numerous. A portion of this fatty substance was allowed to remain a few hours on a piece of writing paper, on which it left a large greasy spot. These appearances seemed to favour a suggestion made by Dr. Bristowe, that the cells or scales intermixed in membranous layers with the crystals of cholesterine, principally on the outer portion of the cholesteatomatous masses, were identical with the oil-containing cells in the central portion, and the fatty substance in the fourth described cyst being derived from them by the simple exudation of their oily contents, instead of being formed by the shedding of epithelium in successive layers from the walls of the cysts into their cavities as described by Muller. The crystals seemed to abound in direct proportion to the disappearance of the oil from the cells, and therefore existed in greatest abundance at and towards the surface of the cholesteatomatous masses.

MEDICAL SOCIETY OF LONDON.

Dr. MURPHY, President, in the Chair.

PORTRAITS OF FOTHERGILL AND LETTSOM.

The President announced that Dr. Vesalius Pettigrew had presented to the Society the portraits in oil of Dr. Fothergill and Dr. Lettsom, as promised by him some time since, and that Mr. Canton had had them restored. (Applause.) The portraits hang on either side of the chair.

Certificates in favour of the following gentlemen as corresponding members, were read, to be ballotted for subsequently by the Council:—Dr. Cutler, of Belgium; Dr. Manoel Carvalho Pereira de Sâ, of Brazil; and Dr. Junod, of Geneva.

YELLOW FEVER OF RIO DE JANEIRO.

Dr. Halley read an abbreviated translation of a "Memoir upon the Yellow Fever of Rio de Janeiro," by Dr. Manoel Carvalho Pereira de Sâ, of Rio Janeiro, Brazil.

The author, after remarking that the year 1849 was characterised by unusual climacteric changes, as exemplified in the drought and great heat, as well as absence of thunder and of the usual summer breezes, and after alluding to the want of hygienic precautions to prevent the importation and propagation of disease by means of strangers, and mentioning the prevalence during the whole year of gastric affections and fever, with a predominance of nervous and typhoid phenomena, terminating in extensive purulent effusions, as well as their augmentation during the autumn, states, that the first accounts of the yellow fever reached Rio on the 13th December by the steamer Pernambucona from the north of Brazil, followed by the corvette, D. John I., also from Bahia, the commander of which avoided communication, in consequence of having lost two out of five cases on the voyage, and that the disease was considered by the Council of Health at Bahia non-contagious, although, up to the 5th January, ten days from its first appearance, not less than 160 strangers had fallen its victims, out of many thousands attacked, and expresses his conviction that the disease was propagated in consequence of the loose sanitary measures taken to prevent not only the ingress of infected persons, but also the accumulation of foci capable of emanating infecting miasmata. He then proceeds to state the results of his own observations at the lazaretto of Praya Formosa, under Dr. Severiano, and says that the disease usually ushered itself in suddenly, without the precursory phenomena common in acute maladies, attacked persons without distinction of class or occupation, and under every variety of circumstance, showing, however, a decided preference for strangers, and particularly for seafaring men. He divides the symptoms into three periods; the first characterised by headache, shivering, and dry furred tongue, the disease being usually benign, and yielding to simple remedies; the second by the same symptoms increased in intensity, with acute pains in the inguinal, lumbar, and cervical regions, and general prostration, with very often a fallacious improvement of short duration, unless speedily taken advantage of; the third by complete prostration, sleeplessness, a dry scaly mouth and tongue, and a sanguineous scum covering the lips; and if, in the second stage vomiting had occurred, it now continued, and was always of a black colour. Carpologia followed, and death. The natives were more exempt than foreigners, but the symptoms were alike in each. Women rarely died of the yellow fever, and the African race more rarely still. Rio de Janeiro, Bahia, Pernambuco, and Para-e-Santos, were the districts chiefly attacked. The author is a decided non-contagionist, and grounds his conclusions chiefly on the fact, that none of those attending the sick at the hospitals caught the infection, as well as on the fact, that, although three sailors died of the disease on board the Medway on her voyage from Rio, 159 passengers, many of whom, including himself, had never had the disease, reached Southampton without having experienced the slightest inconvenience, and states his belief that the disease originated in the absorption into the circulation of poisonous emanations from the decomposition of organic bodies. In regard to treatment, after remarking upon the very opposite therapeutic means recommended by different authors, and the difficulty that the Brazilian physicians experienced in selecting remedies proper for a disease new to their country, says that it was only by observing the means adopted by Nature to induce resolution, that they obtained the clue to the treatment which they eventually all followed, viz., the establishment and maintenance of diaphoresis, an active state of the evacuations, and recourse, with due precaution, to general and local depletion. This plan usually succeeded if employed during the first period; but so soon as the disease had entered the succeeding stages, it became necessary to attend to the various special symptoms as they presented themselves.

Results:—

In 15 Hospitals	6,225 cases.
Cured	4,638 ,,
Died	1,587 ,,

According to accounts, however, presented after the epidemic had ceased, upwards of 12,000 persons died in hospitals and private houses in Rio; and if we include all the localities in which the disease occurred, the number of deaths probably exceeded 22,000.

Dr. Crisp inquired if the skin were noticed to be yellow.

The President observed that he should inform the Society of the history of the paper just read. Dr. Manoel de Sâ, a Brazilian physician, was in England during the past summer, and was anxious to communicate his views respecting yellow fever to the English medical profession; but some difficulty was experienced in so doing, as his paper was written in Portuguese. At last Dr. Halley was good enough to undertake its translation and condensation, but was not, of course, answerable for any of the opinions expressed in it. The paper had not yet been published.

Dr. Sibson, with reference to the translation, wished to ask Dr. Halley what meaning he attached to the word "apoplexy," as connected with some of the cases. It was said in the paper, that the disease in some instances commenced with "apoplexy;" was not "coma" here meant?

Dr. Halley replied, that "apoplexy" was the word used, but it was probable that Dr. Manoel de Sâ intended to speak of coma as the commencing symptom.

Dr. Lankester considered the paper very valuable just now, as a sanitary commission had been sitting for some time in Paris, and had come to the same conclusion as Dr. Gilkrest, that yellow fever is not contagious, and that quarantine regulations were useless, and might be abolished.

Dr. Snow remarked, that from the contents of the paper, he judged that the author held a different opinion. He spoke as if he thought the disease might be introduced into the country; he appeared therefore to believe in its communicability, but not that every one who touched the sick was sure to be attacked. His views were in favour of contagion, but were not extreme.

Dr. Sibson thought the opinions of the Commission at Paris should be received with great caution, as it was planned by, and consisted entirely of, non-contagionists, and the decision was consequently a preconceived idea. He knew that an English medical man, a contagionist, had been nominated to attend, but his name was afterwards withdrawn, and another appointed in his place.

Dr. Routh stated the investigation on the Eclair steamer had set the question of contagion of yellow fever at rest. Yellow fever, properly so called, was not contagious; black vomit was, except to a person who had had it before. Like small-pox, black vomit did not occur twice. The fever at Brazil was imported. This was proof of its contagion; yet it should be remembered, even yellow fever may, under peculiar circumstances, assume a type in which it may prove contagious, though it be not actually black vomit—*el vomito prieto.*

Mr. Bullock read a paper

ON INJURIES TO THE SPINE, AND THEIR RELATION TO THE URINARY ORGANS, ETC.

After a few remarks on the important bearing of physiological phenomena in the study of disease, Mr. Bullock read two cases of injury to the spine, in both of which fractured sternum occurred. In one, which was a case of dislocation of the seventh cervical from the first dorsal, the urine remained acid during the patient's life, a period of eight days; in the other, it became alkaline after the first few days. The frequency of fractured sternum in cases of injury to the spine was then alluded to, and was accounted for in many cases of fracture, because, from the spine having given way the weight of the body would be thrown on the sternum, which must then

almost necessarily be broken. He stated that it had been found fractured in a large number of the *post-mortem* examinations of cases of fractured spine in St. George's Hospital. The condition of the urine and urinary organs was next discussed. Mr. Bullock stated, that there were two opinions as to the state of the urine; one was that it was secreted alkaline by the kidneys, the other that it became so after it reached the bladder. In support of the latter view, he said, that owing to the nerves supplying the bladder being paralysed, the urine was retained, and, although it might be drawn off frequently by catheter, yet a little would always be left, which would irritate the bladder, and cause it to throw out more mucus than natural, which set up a catalytic action, induced the decomposition of urea and the formation of carbonate of ammonia, which, by neutralizing the solvent acid, threw down the phosphates. He had washed out the bladder when the urine was alkaline, and then allowed it to accumulate, when it was drawn off again as long as seven hours afterwards, and was found to be acid. At *post-mortem* examinations, the urine had been squeezed out of the tubules of the kidneys, and found to be acid. He did not think with Mr. Stanley that the spinal marrow, through its connexion with the sympathetic, had that influence over nutrition, secretion, and excretion, which would be implied if alkalinity of the urine was dependent upon the effect produced on the kidney by the cutting off the supply of spinal nerves; but rather that there were, in the sympathetic system of nerves, organic or gelatinous fibres, which regulate the molecular changes which take place in the various processes of nutrition, secretion, &c. In other cases, where there was no injury to the spine, but where the urine was retained in the bladder a length of time, there was alkaline urine—in cases of stricture, for instance. It was important then that the bladder should be frequently washed out, and all sources of irritation to it avoided; for cases of injured spine sometimes proved fatal, not from the injury to the spinal marrow, but from disease of the bladder, which might even extend up to the kidneys. He considered that the cause of the retention of urine was the existence of elastic tissue at the neck of the bladder, without admitting which, it would be difficult, if not impossible, to explain why there should be retention of urine and incontinence of fæces, the muscular fibre of the bladder and of the sphincter ani being both supplied by spinal nerves. The torpid state of the bowels would tend to show that the movements of the intestines were dependent in some degree on the spinal system, probably through the connexion of the sympathetic with the roots of the spinal nerves, but yet that they were not entirely regulated by spinal filaments, and also what were under the control of the spinal system, were dependent on those filaments which terminate in the spinal cord, that they were not voluntary but reflex actions. Another point was, that the formation of bed-sores was not in a great degree dependent on the cutting off the supply of spinal nerves, but more the result of the uninterrupted pressure consequent on the loss of the power of changing the position in the slightest degree, for that uninterrupted pressure very quickly produced sloughing in a perfectly healthy subject, thus assisting to show, that the spinal marrow had very little to do with the function of nutrition.

Dr. Murphy remarked, that one great point of interest in the paper just read was the fact, that the sphincter action at the neck of the bladder was not entirely dependant on muscular power, but also on elastic tissue. He alluded to this, because he was satisfied that elastic tissue had more to do with the action of the neck of the uterus than had muscular fibre.

Dr. Snow, in referring to the urine in these cases becoming alkaline, said he agreed with Mr. Bullock, that its decomposition was owing to the retention of some of the fluid in the bladder, the want of nervous power preventing its discharge. He, however, explained the result differently to Mr. Bullock, who says that the retained urine causes irritation of the mucous membrane, and a secretion of mucus, which acts as a ferment and causes decomposition. Urine is the natural contents of the bladder, and will not cause irritation. He (Dr. Snow) believed that decomposition commences, and excites the irritation which leads to the secretion of mucus. He referred to a series of experiments made by him in 1845 and 1846, which he then brought before the Westminster Medical Society, and which tended to show that when the bladder is not fully emptied decomposition may commence in the retained urine, and the mixed phosphates or the ammoniaco-magnesian phosphate be formed. He had recommended the frequent washing out the bladder with warm water, in such cases, after micturition, and under any circumstances when the urine is alkalescent.

Mr. Henry Lee spoke of the existence of a distinct layer of elastic tissue between the urethra and the prostate gland, which he had seen demonstrated by the late Mr. Tyrrell, and which is sufficient to close the passage unless the bladder possess power enough to overcome it. He had not met with any cases of retention of urine from paralysis of the bladder in females after injury to the spinal cord, and he therefore thought that in men it depended on the action of the elastic tissue, enclosed as it were in the prostate, the retention depending on the want of expulsive power of the bladder, which gradually becomes distended. Its voluntary power is lost by the accident; the involuntary from the permanent distention of the viscus.

Mr. Hancock did not quite agree with the general view of the condition of the urine given by the author, as he had found the urine alkaline almost immediately after the accident, within twenty-four hours, the alkaline urine being the first passed after it. This alkalescence is so frequently met with, that its gradual disappearance is regarded by him as a sign of improvement; when patients are recovering from concussion of the spine, without fracture or injury to the cord, the acid condition of the urine will gradually return. The urine may continue acid after the accident, but not often; and he thought the condition of acidity or alkalescence of the urine after these injuries required further investigation. He would wish to ask Mr. Bullock if he meant to imply that fracture of the sternum occurred in all cases of fracture of the spine, or, if not, what part of the spine, when fractured, is thus complicated? He could understand its occurrence in fracture of the dorsal, but not in the cervical or lumbar.

Dr. Crisp asked the explanation of the priapism or semi-priapism which attends the accident. He could not understand its cause. He mentioned being present at an operation for fractured spine by Mr. Tyrrell, and said he believed that, and one by Mr. Cline, were the only two instances in which it had been practised.

Dr. Sibson alluded to the lowering of the temperature, and to the great tendency to breach of surface in these cases, as owing to the withdrawal of the nervous influence from the circulation in the capillaries. He thought, therefore, that in these cases, all parts exposed to pressure should be shielded from the very first, because the tissues are unable to maintain their own nutrition. Dr. Sibson concluded with some remarks on alterations in the respiratory powers in these accidents.

Mr. Canton remarked, that though there were many circumstances occurring in injuries to the spine which were comprehensible, there were, withal, others of which no adequate explanation had been offered; thus, priapism and emission of semen, which not unfrequently occurred when the mischief was situated in the upper dorsal or cervical regions, were still unexplained phenomena. The higher the seat of the blow, the more liable were these symptoms to occur, and it is well known that when that enlargement, above, of the spinal cord, the cerebellum, had been injured, as by removal of a portion of it by a sabre in battle, that loss of virile power, with atrophy of the testicles, has ensued. The rise of temperature, too, even of several degrees, at the surface of the body, was still unaccounted for. Mr. Canton did not consider that fracture of the sternum occurred in whatever region the vertebral column was injured, but believed it to be confined to the upper dorsal part, for, inasmuch as violent blows on the sternum might fracture the ribs near their angles, but the spinal bones escape in consequence of their strength and connexions; violence applied posteriorly might be transmitted by the ribs, and be expended on the sternum in front. The direction of the transmission of shocks, sustained by the key-stone of an arch, would illustrate this point. The ribs would be more frequently broken anteriorly than they are found to be when the force sprang from behind,—as behind, when it arose at the fore part; but the elastic cartilages, in the former case, yield under the impression and remain intact, transmitting, however, that impression onwards, which, concentrating at the sternum, this bone gives way.

Some further observations were made upon the formation of renal calculi after injury to the loins; and incontinence of urine in irritation of the cord and its membranes, in cases of caries of the spine, was contrasted with retention in traumatic lesion of these parts.

Mr. Bullock briefly replied.

LIVERPOOL MEDICAL SOCIETY.

CASE OF TUBERCULAR DISEASE—CAVITIES IN LUNG SHOWING A HEALING TENDENCY.

By Dr. TURNBULL.

Thomas Hanlon, aged 27, was admitted into the Liverpool Royal Infirmary on the 21st of February, 1850, having been ill thirteen weeks with cough and the usual symptoms of phthisis, which he traced to getting wet. No hereditary tendency could be traced, father having died from being beaten and mother being alive. He was pale, losing flesh rapidly, had night sweats, and abundant purulent expectoration. Pulse, 96.

Physical Signs.—The sound was dull on percussion over both clavicles and below them, especially below the right. In the latter situation respiration was very feeble, and there was some large crackling râle when the patient took a deep inspiration. Below the left clavicle respiration was stronger but bronchial in character, and sibilant and crackling râles were audible more abundantly than on the right side. The height of the patient was 5 feet 8 inches, and his vital capacity ascertained by the spirometer was 155 cubic inches, showing therefore a diminution from the healthy standard of 73. He had been taking cod-liver oil for three weeks before admission with benefit, and he continued the same remedy, with the addition of counter-irritation by acetum cantharidis, and used other remedies suitable to his case, until the middle of March, when he went out, having well-marked physical signs of a cavity in the upper part of the right lung. On the 9th of December, 1850, he again presented himself for admission. He was much stouter than when he had gone out; and stated that he had returned to work soon after he left the Infirmary, and that a few days previous he had caught cold from exposing himself when heated with his work in a foundry. This brought on severe pain in the left breast; but he had previously had very little cough or expectoration, and no perspiration. *Physical Signs.*—Well-marked dulness at the upper part of both sides of the chest anteriorly; on the left side, dry, sibilant râle and creaking, extending from the clavicle to below the nipple. Respiration over this space feeble, as if the bronchial tubes were stuffed with secretion. About two inches below the right clavicle, cavernous respiration, voice, cough, and râle were very distinctly perceived, as if proceeding from a large cavity. He was blistered, and treated with expectorant medicines; but rather fine crepitation and friction sounds were heard for some time in the left mammary and infraclavicular regions. When the inflammatory symptoms had subsided, cod-liver oil was again taken, and likewise the sulphates of iron and quinine. About the middle of March he had so far recovered as to be able to leave the Infirmary, having then the usual signs of cavities in both lungs; those in the left having formed during his second residence in the house. On the 6th of November, 1851, he again applied for admission, the cold weather having brought on a return of cough and night sweats. He then stated, that he had gone to work soon after leaving the infirmary, and had kept to it pretty regularly during seven months. He had never, however, been free from cough and morning expectoration. He suffered more, however, from short breath. Though not labouring from so acute an attack as when admitted at the beginning of the previous year, he was paler and much thinner. The only point worthy of particular notice in reference to the physical signs, was the absence of the signs of cavities in the right side, which had previously always been well marked. On the left, there were mucous and cavernous râles. Debility, with congestion of the lungs, and very copious expectoration were the prominent symptoms, and on the 17th Nov. he sank.

Post-mortem.—Right lung firmly adherent at the upper part. Near the apex anteriorly there is a cavity large enough to contain a very large apple, having an irregular surface with projecting ridges, as if formed by the union of several small ones. It is lined with a greyish white membrane, well organised, and showing a corrugating tendency. There are some deep red spots and patches upon it, apparently indicating the occurrence of recent inflammation. In the centre of several of these there are very small openings into the bronchial tubes The walls of the cavity are very hard, and the apex is very dense, and has many tubercles and small cavities, one of which is nearly the size of a nut. Below the large cavity there is one the size of a large walnut, with a uniform smooth surface, lined by a white membrane without any purulent secretion; there are many miliary tubercles throughout the rest of the lung. At the apex of the left lung there is a cavity larger than any on the right side. The surface exhibits the same irregularity as that of the large one in the right. The lining membrane is white, rather soft, and has a few red spots. There is bluish induration around the cavity, and tubercles of every size are abundantly disseminated through the lung. The lower part of the lung is emphysematous and greatly thickened. Both lungs are œdematous. There is hypertrophy of right ventricle with dilatation.

Remarks.—The point in this case most deserving of notice is the powerful effort made on the part of the constitution to repair the local injury; and this was so far successful that the cavities were lined by membranes which did not secrete pus, and showed a tendency to diminish their size by contraction. This process arrested the disease on two occasions, and prevented it proving fatal in the ordinary way, by the exhausting discharge of purulent matter and hectic fever. Death did not occur from the softening of tubercles, but from congestion and œdema of the lungs, and from their abundant deposit obstructing the circulation. The patient was placed in a very unfavourable position for recovery, and it is only surprising that he should have been so long able, with extensive disease, to do laborious work. It is worthy of notice, that when admitted on the last occasion, the large cavity on the right side could not be perceived on stethoscopic examination. I have no doubt that this arose from the smallness of the openings into the bronchial tubes, none of which were larger than sufficient to admit a probe. This should make us cautious in supposing that a cavity has ceased to exist because we cannot discover it with the stethoscope. There is reason to believe that the disease began in this case in the right lung; but I may remark, that such is not the general rule. Two days ago I went through notes I have kept of fifty-six cases of tubercular disease of the lungs; and I find that in thirty the left lung was chiefly, and probably, therefore, primarily affected; in nineteen the right was most affected, and, in seven, both were so much diseased, that no opinion could be formed as to which it had commenced in.

MEDICAL NEWS.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, January 29, 1852:—

Cleeve, Frederick Ward, Bradninch, Devon.
Halls, Thomas Edward, Broad-street, Horselydown.
Simpson, Henry, Chester.

Military Appointment.—6th Dragoon Guards, Assistant-Surgeon Stuart Moore, from the Staff, to be Assistant-surgeon, vice Cameron, who resigns.

Naval Appointments.—Surgeon John M'Whinnie, (1847,) to the Vesuvius, steam-sloop, at Devonport. Assistant-Surgeons Edward W. Pritchard, (1846,) to the Vesuvius; and Daniel Saunders, (acting,) to the Victory, flag-ship at Portsmouth.

Medical Appointments and Vacancies.—An Assistant-surgeon to the Moorfields or London Ophthalmic Hospital will be appointed on the 9th instant. As Mr. Wordsworth is the only gentleman whose testimonials have been approved, his election is certain. Mr. Joseph Bowen Partridge, (nephew of Professor Partridge of King's College Hospital, London), has been appointed House Surgeon to the Cumberland Infirmary. Dr. Samuel Griffith, Physician to the Farringdon General Dispensary and Lying-in Charity, has just been appointed Assistant Physician, Accoucheur to St. Thomas's Hospital. Dr. Heslop, of Birmingham, was on Wednesday last appointed one of the Physicians to the Dispensary of that town.

Donations and Bequests to Medical Charities.—The authorities of the Free Cancer Hospital advertise a donation of 50*l.* from J. D., and one of 20*l.* from S. A. W. The University College Hospital has received 30*l.* from A. B., being the tenth donation from that gentleman, the entire amount presented by him being 250*l.*

British Medical Fund.—A meeting of the members of the medical Profession, resident in Coventry and its vicinity, took place at St. Mary's Hall, on the 23rd ult., for the purpose of receiving from the Secretary an explanation of the nature and objects of the Institution. Among the gentlemen present were Dr. Powell, Messrs. Bury, Laxon, M.D., Troughton, W. F. Barton, J. G. Overton, M.D., M. Coulcher, Daniell, of Newport Pagnell; Bodington and Draper, of Kenilworth; Ellis, of Dunchureh; Orton, of Foleshill; Clarke, of Meriden, etc. Letters were received from Dr. Phillips and others, regretting their absence, and expressive of adhesion to the principles of the Institution. Dr. Powell opened the proceedings by an appropriate address, to the effect, that he considered the Society had great claims on his professional brethren, and was most worthy of their adoption, encouragement, and liberal support. The principles on which it was based, and the characters of those gentlemen through whose unwearied exertions it had attained its present position, were calculated, not only to render its benefits permanent, but also to afford them all possible confidence and security. The Secretary and Mr. Daniell explained the nature and objects of the Society, Mr. Bury expressed the pleasure he had felt in listening to the details afforded them by the Secretary, and moved—"That this meeting highly approves of the principles and objects of the 'British Medical Fund,' and strongly recommends the Society to the warmest encouragement and support of the Profession at large." Mr. Ellis, in seconding the resolution, said he fully concurred in what had fallen from Mr.

Bury, and that the Society would certainly have his warmest support. Mr. Troughton, in proposing the second resolution, said he considered much was due to Dr. Forbes and the Directors, for the great interest they had shown in establishing the Society. He, therefore, moved—"That the best thanks of this meeting, and of the Profession generally, are due, and are hereby offered, to Dr. Forbes and the Directors of the 'British Medical Fund,' for their indefatigable labours and exertions in behalf of the Institution." Mr. Orton had great pleasure in seconding so appropriate a resolution. Mr. Bodington expressed the very great pleasure he had felt in meeting Mr. Daniell on this occasion, and in listening to his eloquent address, and he begged to move: "That the thanks of this meeting are due, and are hereby offered, to Edward Daniell, Esq., of Newport Pagnell, for his unceasing and unwearied endeavours to promote the welfare of his professional brethren." Dr. Laxon had much pleasure in seconding the resolution. Mr. Conlcher proposed: "That the thanks of the meeting be offered to the Mayor of Coventry, for his kindness in permitting them the use of St. Mary's Hall on this occasion." Mr. Daniell, after paying a neat and complimentary mark of respect to the Chairman, had much pleasure in proposing the following resolution, and which was carried unanimously: "That the best and warmest thanks of this meeting are due, and are hereby offered, to Dr. Powell, for his kindness in presiding on this occasion, and for his very courteous and gentlemanly conduct in the chair." Dr. Powell having returned thanks, the meeting separated.

The North Pancras Provident Dispensary.—The second annual meeting of the Governors of the above Institution was held on Thursday, the 29th ult., at the Dispensary, in Hawley-crescent, Camden-town, when a Report of the proceedings of the past year was presented, together with a statement of the Society's finances. It appeared, that the number of Members' cards issued during the past year had been 234, and that the total number on the register on the 31st of December last was 321; which, reckoning each card to represent, on an average, a family of three persons, showed that the total number of individual members was 963. Although the above numbers, contrasted with those of the preceding year, showed that a considerable decrease in the number of Members had taken place, yet that circumstance was accounted for in a manner satisfactory to the meeting. The number of cases under medical treatment during the past year has been 1830, together with about 70 midwifery cases. By the cash statements it appeared, that the amount received in donations and subscriptions from the public in aid of the Contributors' Fund had been 88*l.* 18s. 10d., while the expenditure had been 139*l.* 13s. 9d. The Members' payments had amounted to 318*l.* 18s. 9d., including a balance from last year of 63*l.* 11s. 2d. The expenditure against this fund had been 265*l.* 4s. 7d., leaving a balance of 53*l.* 14s. 2d., which had been applied by the Committee, with the concurrence of the Medical Officers, to the liquidation of the balance against the Contributors' Fund. It appeared also, that the sum of 117*l.* 1s. 6d. (included in the expenditure of the Members' Fund) had been divided among the Medical Officers in ordinary, in proportion to the number of cases attended by each. The Report, which was considered satisfactory by the Governors present, was ordered to be printed, and circulated among the public.

Epidemiological Society.—At the meeting of this Society, held on Monday, February 2, Dr. Babington, president, in the chair, Dr. Bryson read a most valuable and interesting paper "On the Epidemic Dysentery, by which the Army and the Fleet were invaded during their Operations in the Rivers of China." The paper, which was listened to with great attention by a full meeting, while it graphically described the ravages of the fatal malady among our soldiers and sailors, also pointed out some important facts regarding the proper time for military operations in China; from which not only admirals and generals, but even governments, might read a useful lesson. Dr. Bryson illustrated his subject by a map of the world, in which were traced the various points on the globe where dysentery more commonly and constantly prevails. An animated discussion followed, in which Dr. M'William, Dr. Waller Lewis, Dr. James Bird, Dr. Sibson, Dr. Snow, Dr. Beattie, and Dr. Milroy took part.

Royal Dispensary for Diseases of the Ear, Dean-street.—At the half-yearly meeting of the governors of this Institution, held last week, Mr. Cole in the chair, the Report announced sundry additional subscriptions and donations; after which Mr. Harvey, the surgeon to the Dispensary, reported that the number of patients admitted during the six months amounted to 506, including cases of all the various diseases of the ear, and some complicated affections of the head and throat. Of these, 196 had been cured; remaining in weekly attendance, 300. A vote of thanks to Mr. Harvey, and another to the Chairman, were passed, and an appeal to the affluent in behalf of the charity was agreed to, and then the meeting separated.

German Hospital, Dalston.—The Report read lately at the Annual Meeting of the Governors of this Institution was in reality for seven months only, owing to the change in the time at which it was held. The medical report was very favourable. The number of in-patients from the 1st of June to the 31st of December was 344; of which 105 were accidents. The out-patients were 2071 in number; at the Eastern Dispensary, 608; at the Western, 298; total for the seven months, 3321. The total number of patients since the formation of the hospital, in 1845, was, in-patients, 2810; out-patients at the hospital, 10,134; at the Eastern Dispensary, 4514; at the Western, 1005; total, 18,463. The receipts for the seven months exceeded the expenses by 44*l.* 12s., which remains as a balance, besides a sum of 2100*l.* in the New 3½ per Cents.; including a sum of 650*l.* for the erection of the Adolphus Ward. Considerable benefit was stated to have been derived from a penny subscription. The decease of Dr. Kœnig, of the British Museum, had deprived the Institution of a valued supporter. He had, however, remembered the hospital in his will, having bequeathed it a legacy of 200*l.* 30*l.* also had been received from an anonymous donor, and 31*l.* 11s. from the Commissioners of the Zollverein at the Great Exhibition, the result of a collection among the visiters to their department. The passage of the railway near the hospital was noted as a great source of annoyance, and the removal of the establishment to another locality was mooted. If that were effected, an English Ward would be perhaps added to the building.

The Royal Medico-Botanical Society, under the Presidency of Earl Stanhope, after an existence of nearly thirty years, is about to be broken up, for want of the necessary funds, many of the old members having died, and the Profession and the public having neglected to render it the requisite pecuniary assistance for the carrying out of its object. We understand that the property of the Society will be sold privately. The break up of so old and useful a Society is much to be lamented. Government should render assistance, and prevent so deplorable a termination of its labours.

University Intelligence.—Dr. Lee's reader in Anatomy proposes to commence his next course of Lectures on the 10th inst. in the Anatomical Museum of Christ Church, Oxford.

The late Joshua Brooks.—An excellent bust of this distinguished anatomist has been presented to the Royal College of Surgeons by John Nealds, Esq., of Guildford.

Hill *v.* Philp.—A singular occurrence took place in the Court of Exchequer on Tuesday week. The plaintiff had been confined in Dr. Philp's asylum at Kensington for a certain time, and afterwards in another establishment, from which he was discharged cured. He was induced to commence legal proceedings against Dr. Philp, for alleged neglect and ill-treatment while a patient. To this the defendant pleaded the general issue, and an order had been made by Mr. Baron Martin under the New Evidence Act to enable the plaintiff to examine certain books belonging to the defendant connected with the management of the asylum. This order was resisted. Mr. Baron Parke, having inquired if the plaintiff denied his insanity, was answered in the affirmative by Mr. James, his counsel, learned in the law but not in psychological study, for he immediately added from himself, "I may say he is as sane as I am myself." Scarcely were these words out of his mouth, before the utter insanity of his client was made manifest before the whole court, to the confusion of the confident barrister. A letter was handed up from the floor of the court to Mr. Baron Alderson, which seemed to excite His Lordship's risible faculties. Having perused this epistle, His Lordship handed it to Mr. Baron Parke, and, addressing Mr. James, said, "I don't know whether this letter came from your client," [Mr. James: "I hope not."] "for the writer charges my brother Parke with having once committed felony." (Laughter.) Mr. Baron Parke: "And I beg to add that he charges my brother Alderson, too." (Increased laughter.) Mr. Baron Alderson: "Yes; and with felony committed nearly twenty years ago in Durham." Mr. James could not believe that the letter proceeded from his client. "At all events, it argued great insanity in the writer." (Laughter.) And thus the counsel was obliged to acknowledge that the conduct of the man for whose intellect he had vouched "argued great insanity." Some months back, one of the chief judges, we forget which, in trying a lunacy case, declared that, in future in such cases, medical men should only state facts, and not express an opinion, leaving the judge and the jury to decide from those facts. How would such a rule have applied in the present case? Suppose the question in doubt was as to the plaintiff's sanity. Can there be a question, then, that but for the fortuitous circumstance of the letter, the jury would have been so charged

by the presiding judge that they would have returned a verdict of "Not insane?" We have a learned and talented counsel, quick in appreciating the characters and failings of his fellow-creatures, committing the egregious mistake of declaring his client as sane as himself, when the very next moment the man affords indubitable evidence of his insanity. Is it wise to call upon juries to record their opinion as to the sanity or insanity of any one, without their previously having the opinions of medical men, conversant with psychological science, as well as the facts to which they can depose? The judge himself may be mistaken; that judge who pronounced the opinion recorded above decidedly was. Judges and counsel are avowedly incapable of the task; *à plus forte raison*, juries, special though they be, unaided by the lights of science, are thoroughly helpless in the matter.

PUBLIC BATHS AND WASHHOUSES.—I. An Account of the Bathing and Washing at the Establishments in London, which are conducted under or in accordance with the Acts 9 and 10 Vic., c. lxxiv., and 10 & 11 Vic., c. lxi,—and at a few out of the many similar Establishments in the Country.

RETURN FOR THE YEAR ENDED CHRISTMAS 1851.

Name and Title of the Establishment.	BATHS. Number of Bathers.	WASHHOUSES. Number of Washers.	WASHHOUSES. Number of Hours Washing, &c. &c.	Total Receipts. £ s. d.
METROPOLIS.				
The Model, Whitechapel ...	156,310	43,462	98,824	2,674 8 10
St. Martin-in-the-Fields ...	213,185	50,200	103,836	3,937 11 10
St. Marylebone	173,157	24,718	72,236	2,543 2 5
St. Margaret and St. John, Westminster, (opened 12th May)	83,405	13,189	27,895½	1,119 3 2
Greenwich, (opened 2nd September)	20,885	682	2,754	366 1 5
Totals	647,242	132,231	305,545½	10,640 7 8
COUNTRY.				
Liverpool—Cornwallis-street, (opened 12th May)	86,899	not open.		1,283 12 1
Paul-street	42,353	19,455	116,630	766 17 8
Hull	63,765	4,968	19,290	732 4 9
Bristol	43,373	5,746	11,511½	610 11 0
Preston, (opened 26th May) .	24,515	2,179	6,585	272 12 2
Birmingham (opened 12th May)	78,646	908	3,688	1,042 6 5

This Return does not include the bathing and washing at the Establishment in George-street, Euston-square, which is not conducted under the Public Baths and Washhouses Acts.

II. A Statement of the numbers of the Bathers and Washers, and the Receipts, at the Model Establishment, Goulston-square, Whitechapel, for the four past years.

Years ended Christmas.	BATHS. Number of Bathers.	WASHHOUSES. Number of Washers.	WASHHOUSES. Number of Hours Washing, &c. &c.	Total Receipts. £ s. d.
1848.	48,637	not open.		580 9 3
1849.	108,082	*5,794	21,671	1,404 19 10
1850.	137,519	14,247	31,718	2,052 9 4
1851.	156,310	43,462	98,824	2,671 8 10
Increase on the Year in 1851	18,791	29,215	67,106	621 19 6

* Open gratuitously during the prevalence of the Cholera.

SCARLET FEVER has been very prevalent and very fatal in some parts of the parish of St. Clement Danes. Fourteen deaths in one portion only have been recorded lately from that cause within a short period of the time. In one house we visited, where there were in one room three children lying sick of the disease, and the body of another deceased from scarlet fever in its coffin in the next room; the atmosphere of both rooms was most offensive; the children's bodies had not been washed for ten days, nor had they had any clean linen all that time, while the drains, the privy in the cellar, and the cesspool, sent forth a most foul and disgusting stench. The result was, as might be anticipated, the scarlatina was most malignant, and all the children perished.

M. DEVILLE, Professor of Anatomy, one of those imprisoned at Belleisle, for being a member of the Socialist Electoral Committee, and since sentenced to transportation, has, in consequence of an application numerously signed by the faculty, been promised his liberty, on condition of renouncing politics, and abjuring all opposition to the Government.

STATISTICS OF LUNATICS.—From the Annual Report of the Commissioners in Lunacy, just printed, it appears, that on the 1st of January 1851, there were 16,456 insane persons confined in asylums, hospitals, and licensed houses in England and Wales; of which 7843 were males, and 8613 females.

PAUPER LUNATICS.—It appears from the Report of the Commissioners in Lunacy, just issued, that the total number of pauper lunatics in asylums, registered hospitals, and licensed houses, on the 1st of January last, was 12,059, or 5492 males, and, 6567 females.

A BILL is before the House of Assembly in Jamaica, for the proposed abolishing the office of coroner, and to throw the duties on the magistracy of the island. It has met much opposition. A similar proposal was made some time since by the Middlesex magistrates.

LUNATIC BLOOMERISM.—The *Western Times* describes a Bloomer ball given to the lunatics confined in the Exeter County Asylum.

THE IRISH MURDERERS.—It is reported that an eminent medical man of Newry, name not mentioned, has received a "notice," to the effect that the Riband ruffians purpose his murder.

INDIA.—Surgeon-General Sinclair retires from the service, and from India, after having been upwards of 32 years in the Bombay medical service. Dr. Dore again becomes a superintending surgeon. Large quantities of manganese ore have been found near Vizagapatam and Mirzapore. The number of deaths in Bombay, during December, was 1152; of which 218 were from cholera, and 15 from violence. In November, the deaths only numbered 793; 28 only being from epidemic diseases. Assistant-Surgeons Campbell and Miles have obtained medical furloughs to Europe.

THE PRESERVED (?) MEATS.—The *Times* states, that out of 6378 canisters of preserved meats, examined at Portsmouth, 5168 have been condemned, and only 910 allowed to pass,—that is to say, that not 1 in 6 has been found fit for food. We have reason to know that similar inquiries and examinations have been instituted at other Governmental depôts, and with, if possible, more disgraceful results. Fortunately, in no instance is a ship victualled solely with Goldner's foul messes, as otherwise the consequences might be dreadful. We have heard that cases of severe fever of a typhoid class have occurred in the navy from the use of this meat.

DEATHS *in the Metropolis for the week ending Saturday, January* 31, 1852.

CAUSES OF DEATH.	JAN. 31. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	445	335	212	1002	10706
SPECIFIED CAUSES	445	333	211	989	10614
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	163	44	8	215	2079
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	4	16	19	39	517
3. Tubercular Diseases	67	117	5	189	1789
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	46	23	36	105	1229
5. Diseases of the Heart and Blood-vessels	3	24	8	35	359
6. Diseases of the Lungs and of the other Organs of Respiration ...	67	44	65	176	2310
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	29	30	12	71	568
8. Diseases of the Kidneys, &c. ...	...	8	4	12	95
9. Childbirth, Diseases of the Uterus ...	...	8	2	10	106
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	4	2	7	76
11. Diseases of the Skin, Cellular Tissue, &c.	2	3	...	5	14
12. Malformations	5	...	...	5	30
13. Premature Birth and Debility ...	24	...	...	24	213
14. Atrophy	27	1	3	31	172
15. Age	...	...	46	46	726
16. Sudden	1	2	...	3	116
17. Violence, Privation, Cold, and Intemperance	6	9	1	16	215
CAUSES NOT SPECIFIED	...	2	1	13	92

TO CORRESPONDENTS.

THE crowded state of our correspondence, and the great length of the report of the proceedings of the Royal Medical and Chirurgical Society, oblige us to omit, this week, our usual lecture. Mr. Quain's lecture, however, is in print.

OUR woodentter not having sent the engraving for Mr. Hioton's paper, it must be omitted till next week.

MEDICAL ————.

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall be obliged by your publishing the following note, which I have sent to the Editor of the "Medical Circular." My object in asking you to do so is, that others may follow my example.

I am, &c.,

46, Clarges-street. RICHARD PAYNE COTTON.

"To the Editor of the 'Medical Circular.'

"Dr. Cotton requests that the Editor of the 'Medical Circular' will be good enough to omit all mention of his name in the Biography which he is now publishing, as he deems such a display highly detrimental to the honour of the Medical Profession."

The letter of Professor MacDonald, of St. Andrews, is written in a style and spirit quite in accordance with the estimate we had formed of the mental capacity, gentlemanly tastes, and moral tone of its writer.

A Student of Three Years' Standing.—We advise you by all means to work hard, but methodically. Do not grasp at too much; propose but little to the mind at a time, but master that little.

A Subscriber.—1. If for a Government vessel, it would be advisable to make application to Lieutenant M'Lean, the agent, who will furnish all the necessary information. For private emigrant ships, apply to the owners; the surgeon to such a ship, whether Governmental or mercantile, must be passed by Lieutenant M'Lean, who will overhaul all his testimonials, and ascertain that he is duly qualified. 2. The pay varies from 7s. to 10s. per head for all emigrants landed alive at the port of debarkation. 3. Australia is crowded with medical practitioners; unless, perhaps, at some of the ports and districts newly established. The surgeon intending to settle in South Australia must be prepared to be a grazier or farmer as well as surgeon, unless he prefer the gold diggings. 4. The advertisements in the newspapers would be the best guide on that subject. On that point we cannot know more than our Correspondent himself may, if he will take a little trouble.

Mr. Jones's papers on Excision of Joints will speedily be published.

Pneumotologist.—The truth in question does not lie at the bottom of any well: it may be seen by everybody but the poor self-deluded mesmerist, whose eyes, in respect to himself, are made to transcend the chameleon and take all colours, "like the hands of dyers," except the quiet sober colouring of truth.

Mr. Clarke's printed paper on the Structure of the Spinal Cord was duly received.

Mr. Jones, of Stofford-street, Peckham.—Ours is essentially a medical journal; and, therefore, we decline to insert communications from any other than medical men.

L. H., Sheffield.—We can give you little information beyond this,—that when last heard of he was still hovering on the trail of homœopathy. If so, as Anacreon's dove says, "you know the rest."

Tyro.—The inanity that gave origin, on the one hand, to the words *allopathy*, *isopathy*, and *homœopathy*, and the gross credulity or knavery which, on the other hand, gave them circulation, are the only points in the history of these words, that seem worth mentioning. No sensible man doubts that these, and many other words, are surely destined to take their place with the forgotten *quarribibluxes*, and similar words that have, to all appearance, been invented only *pour conjurer les diables*.

Quæsitor asks—Why does a man lose the hair on the top of his head and not behind, and on the sides? Why does not a woman lose the hair from her head as well as a man?

A Student.—Sir Isaac Newton and others, when engaged in study, not only abstained from wine and fermented liquors, but also from animal food. Seek your libations "where the crystal fountain flows." None other are safe; none other genuine.

Mr. Henry Smith, of Caroline street, Bedford-square, lays claim to the invention of the instrument for applying a solution of nitrate of silver to the urethra, which was lately described by Mr. Henry Thompson in the "Lancet." The unfairness of not permitting Mr. H. Smith to reply to Mr. H. Thompson in the same journal in which the invention was appropriated, is so great, that we shall depart from our usual habit, and publish next week Mr. Smith's communication. If Mr. H. Smith is correct, we are quite sure that, at any rate, Mr. H. Thompson, will at once acknowledge the prior claim.

Edinensis.—Although Jamaica has not yet lost all its prestige in the eyes of your countrymen, you can scarcely be ignorant that, during the last twenty years, hundreds of fortunes have been there lost for one that has been made. In the East you might do better—Egypt, Greece, or Constantinople. But we suggest only.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you inform me, through the medium of your excellent publication, if a legally-qualified general practitioner be justified, upon any legal and proper ground, in meeting in consultation upon a medical case an individual who merely possesses the diploma as member of the College of Surgeons of England, and who, in defiance of the Act of 1815, is in practice as an apothecary. I am, &c.,

JUSTITIA.

[There cannot be a question that a general practitioner ought to meet in consultation on a medical case a member of the College of Surgeons, although he be not a Licentiate of the Apothecaries' Society. The most accomplished and *pure* physician in London would not decline to consult with Sir B. C. Brodie, or Mr. Lawrence, in a case in which the patient desired to have the opinion of both. If the surgeon alluded to be practising illegally, *Justitia* can make the fact known to the proper authorities.]

A Hater of Quacks.—There were certain serpents which, when dead, the Egyptians buried in the temple of Jupiter. What wonder, then, that so many reptiles should be found crawling near—but not in—the temple of Æsculapius?

The Interested M.R.C.S.—1st question, yes; but it would be better to obtain the consent and co-operation of the Society of Apothecaries. Upon a proper representation of the facts, the authorities will readily give their consent, and lend their name to the proceeding. 2nd. If the bills be made out in A's name for attendance in medical cases, he cannot recover: if made out in B's name, B must be the plaintiff, nominally at least, and he alone can recover. In surgical cases A can recover. 3rd. The same answer applies. If B, although certified, be acting as A's assistant or partner, A may be proceeded against, as the law says *qui facit per alium facit per se*; but it would be safer to take cases attended by A personally. 4th. No.

A Country Surgeon.—Because you have attempted an impossibility, do not think your labour has been in vain. Look at your arm that holds the bridle; would it have been so robust and muscular without daily exercise?

An Inquirer.—Were all the homœopathic globules in this great Babylon made into a paste, with a suitable quantity of an infinitesimal solution of lachesis, and dynamized night and day for a dozen years to come, the pâthy thus confected would not disturb the digestion of a "silly, silly fly;" and happy would be the lucky cricket or cockroach that should be the first to get on board the dainty dish. You may eat as many of them (we mean the globules) as you please; but bread is better.

Mr. Solomon's proofs had not reached us when we went to press.

We shall be exceedingly obliged to Correspondents to append titles to their various communications.

COMMUNICATIONS have been received from—

Mr. WHITE COOPER, of St. Mary's Hospital, and Berkeley-square—CASES IN OPHTHALMIC PRACTICE; Mr. JORDAN, of Queen's College, Birmingham; Professor SIEBOLD—On the NON-SEXUAL GENERATION of the PSYCHIDÆ; COSMOPOLITE—On LARGE DOSES of ARSENIC; Mr. LEE, of King's College Hospital, and Dover-street — On RE-UNION of FRACTURES at the BASE of the SKULL; Mr. GIBBONS, of the North Dispensary, Liverpool—On SCARLATINA; Dr. RAMSBOTHAM, of New Broad-street, and Portman-square—On the FINAL CAUSE of MENSTRUATION; M.D.—On the FINAL CAUSE of MENSTRUATION; Mr. BRANDY COOPER, of Guy's Hospital, and Spring-gardens—I. On EXCISION of the CLAVICLE: II. On ENCHONDROMA of the RADIUS; Dr. J. W. GRIFFITH, of the Finsbury Dispensary, and St. John's-square—REMARKS on CALCULI; Mr. HAVERS, of Bedford-place—On OBSTRUCTION of the PULMONARY ARTERIES a CAUSE of SUDDEN DEATH after LABOUR; M.D.—On the MODE of DISCUSSING the QUESTION of ULCERATION of the CERVIX UTERI; Mr. GARDNER, of Southampton—CASES of CONVULSIONS DURING LABOUR; Mr. MILTON, of Jewin-street—HOSPITAL REPORT; Mr. GRIMSDALE, of the Liverpool Lying-in Hospital—MEDICAL SOCIETY REPORT; Dr. BARCLAY, of St. George's Hospital—HOSPITAL REPORTS; Mr. N. WARD, of the London Hospital—HOSPITAL REPORTS; Dr. EDWARD SMITH of Norfolk-terrace, Hyde-park—On WEEKLY MORTALITY TABLES; Mr. WILLIAMS, of Queen Adelaide's Hospital, and Dorchester-place—CASE of PROLONGED GESTATION; Mr. CUPISS, of Croydon—CASE of PROLONGED GESTATION; Mr. JONES, of Jersey—On EXCISION of JOINTS, WITH CASES; Dr. W. GAIRDNER, of Edinburgh—HOMŒOPATHIC HOSPITAL STATISTICS; Dr. EVERETT, of Devizes—On LARGE DOSES of ARSENIC; Mr. SCOTT, of Swansea—On FIXING ARTIFICIAL TEETH; Mr. HENRY SMITH, of Caroline-street, Bedford-square—On a NEW INSTRUMENT for APPLYING NITRATE of SILVER in SOLUTION to the URETHRA; Mr. KESTEVEN, of Upper Holloway—On the FINAL CAUSE of MENSTRUATION; Dr. GOODMAN, of Manchester—On NERVE FORCE; Mr. J. V. SOLOMONS, of the Birmingham Eye Infirmary; AN INTERESTED M.R.C.S.; A SUBSCRIBER; Mr. CLARKE, of Warwick-street, Pimlico; Mr. JONES, of Jersey; QUÆSITOR; Mr. POSTGATE, of Birmingham; Professor MACDONALD, of St. Andrews; JUSTITIA; A STUDENT OF THREE YEARS' STANDING; PNEUMATOLOGIST; L. H., Sheffield; TYRO; A STUDENT; EDINENSIS; A HATER OF QUACKS; A COUNTRY SURGEON; AN INQUIRER.

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DISEASES OF THE RECTUM.

A few words respecting excision as applied to internal hæmorrhoids—a method of treatment which has been largely practised—before I proceed to another part of our subject. Personally, I have no experience of this operation; but I will briefly refer to what has occurred respecting it in the practice of two or three very eminent surgeons. You will find in the lectures of Sir A. Cooper an account of two cases in which death resulted from the effect of the bleeding that supervened upon the operation; and Sir B. Brodie states, that he very nearly lost two patients under the same circumstances. Both these surgeons renounced the practice afterwards. Baron Dupuytren, who always removed the hæmorrhoids with the scissors, states that, after the operation, it is necessary to leave an assistant with the patient, in order that he may be ready to arrest the hæmorrhage. He used the heated iron to effect this object; and so common was hæmorrhage in his practice, that he had special instruments constructed for this purpose—*cautère en haricot: cautère en roseau*. Indeed, this surgeon seems to have been finally disposed to advise that the cautery should be used in every case at once after the excision of the tumour, as he had found that hæmorrhage requiring this means for its arrest had occurred in two-fifths of the cases operated on. There is, it must be remembered, this bad peculiarity in the hæmorrhage occurring in such cases, namely, that as the blood is prevented from escaping by the sphincter ani, the surgeon or his assistant, be he ever so watchful, does not become aware that hæmorrhage is going on till the patient either is rendered faint by the loss of blood, or has a desire to evacuate on account of the accumulation of this in the rectum. Sir A. Cooper, apprehensive in one case lest his patient, who was an aged nobleman, should bleed, remained by him and applied a ligature to the bleeding vessel, but not (for the reason just mentioned) till after a large quantity of blood had been lost, from the effect of which the patient died. This statement will explain, without further remark, why I have not had recourse to the operation in question.

External Hæmorrhoids.

The cases which have hitherto been before us have all been examples of internal hæmorrhoids, that is to say, of vascular tumours covered with the mucous membrane, and concealed from view till they are forced below the sphincter ani. We shall now turn to the external variety, in which the tumour is of the same kind, but situated below the sphincter, visible upon the surface without any change in position, and covered with skin. It is only to the peculiarities of condition and treatment, that it is necessary to refer in this place; for the observations already made under the head of internal hæmorrhoids, upon the causes of the disease, and the constitutional state which induces or accompanies it, as well as upon the general management, may be taken to apply equally to the external variety.

Many persons, when not quite well in health or after some irregularity, whether excess in living or a too sedentary life, are annoyed from time to time, and for a day or two, with an itching and slight swelling, or with a slightly swollen and tender point near the anus; and this commonly disappears spontaneously, leaving no trace behind.

Other forms of the complaint, instead of being noticed in the abstract, may be illustrated by the brief mention of actual cases.

(*a*) A professional gentleman called upon me to be relieved from the annoyance occasioned by a single small lump, which was about the size of a marble, and was very tender and hard. After drawing a small bistoury across the tumour, I turned out a clot of blood, and the patient went away to his avocations.

(*b*) In another instance of a swelling of the same kind in a female, there was some bleeding after I had laid it open. A large vein was observable creeping, beneath the mucous membrane, down to this pile; but the bleeding, which seemed arterial, was easily restrained without a ligature. In these cases, especially the latter, much pain was felt in the evacuation from the bowels, and there was entire inability of sitting down in the ordinary way.

(*c*) A lady, who had suffered for several years, at intervals, from internal hæmorrhoids and losses of blood, was relieved by the application of ligatures. But, at a later period, a small swelling formed externally, and continued for some time to be acutely painful. Upon examination, I found that pus issued from the upper part of the little swelling when this was pressed upon; and from the situation of the opening, and the dependent position of the little sac, suppuration and suffering would have continued for a long space of time. I laid it completely open, and prevented the adhesion of the edges of the incision. The swelling soon disappeared altogether. This was an example of abscess formed in the cavity of the hæmorrhoid.

There was but little constitutional disturbance in any of the preceding cases. That which follows exemplifies an acute attack of external hæmorrhoids.

(*d*) A gentleman of eminence in the scientific world, having been engaged for some months in preparing a work for the press, and therefore much confined to his desk, was attacked, almost without warning, with pain and swelling near the anus. At each side there were prominent swellings, upon which the skin was red, and immediately beneath it there was an appearance of some serous effusion. The pain was extreme, accompanied with restlessness and want of sleep. The tongue was loaded; the appetite much impaired; pulse but little accelerated. The sitting posture, in such a case, is quite out of the question. The patient remained in bed. Leeches, followed by fomentation, and the application of spongio-piline squeezed from hot water, were used. The medical treatment was of the kind mentioned in the first lecture as suitable to internal hæmorrhoids. In a few days nothing remained of the painful swellings, but a little enlargement and thickening of some of the folds of skin that belong to that part. In this case there was seen, what often occurs in this disease, namely, a rapid, almost sudden, change from suffering to the entire absence of this. The patient to-day is in bed, or on a couch, with a painful tumour, and to-morrow, it may be, is abroad, and quite well.

(*e*) An unmarried lady, otherwise in good health, had suffered for some years with internal and external hæmorrhoids, and the former were, some time back, removed by ligature. Considerable pain, attended by inability to sit or walk (especially to sit), having been present for several months, she desired to be relieved from this annoyance. Under the skin three indurated masses are found at the margin of the anus, two being partly blended together. From time to time these swellings have taken on inflammatory action, and then there is much distress. On this account the patient is the more anxious for permanent relief. After some preparation, by the action of aperients, the tumours were removed. Held up with a pair of "fenestrated" forceps, the fold of skin and the contained tumour were excised with a pair of scissors curved on the side. As one point bled smartly, a pin was passed obliquely through it, and a soft ligature was turned over the end of the pin. An opiate was given soon after. The pin was withdrawn on the following day. There was œdema in the integuments around, but this soon subsided, and the recovery went on rapidly.

(*f*) W. Galliome, aged 42, [Hospital Case-book, No. 18], a person reported to be suffering from phthisis, and from repeated losses of blood by the bowel as well as by expectoration, was brought into the surgeon's wards, in November, 1850, in consequence of profuse bleeding from the rectum, by which he was reduced to a state of extreme depression. This case will be noticed only as far as is necessary for our present purpose. I found blood issuing in a narrow continuous jet from a round opening in the skin over a hæmorrhoidal tumour situated at one side of the anus. Chloroform being administered, a double ligature was passed, the skin was divided quite through at each side, and the ends of the string were then tied in the groove made through the integument. A draught, containing 30 minims of tinct. opii was given in the evening. On the following day, the patient complained that the urine passed slowly, and this inconvenience continued in a degree for a couple of days. The ligature came away between the fourth and fifth days after its application. The patient subsequently had a slight attack of diarrhœa, which

was arrested with the decoctum hæmatoxyli and tincture of kino, together with enemata of starch and opium. In ten days he left the hospital cured as far as the hæmorrhoidal affection was concerned. The bleeding did not return. It may be observed respecting this case, that I do not look upon the diarrhœa as connected with the operation. It came on about five days after this, and the patient had been long suffering from organic disease.

From these brief sketches of cases illustrative of various phases of the disease, I proceed to make some general observations; and it is to be understood that I shall dwell only, as before stated, upon points which are special or peculiar to external hæmorrhoids.

The external hæmorrhoids vary much in size, from a swelling little more than discernible to a tumour the size of an egg. When of any magnitude they are a source of much inconvenience on account of interfering with the sitting posture, and when in any degree inflamed they are inconvenient for the same reason; and, moreover, they are then productive of much pain, especially during the evacuation of the bowel. In the inflamed state the skin is at the same time affected, and every disease accompanied with excited action in this part causes much suffering, owing no doubt to its organisation. The distress, too, is augmented by the spasmodic action of the sphincter, which we shall find usually accompanying irritation or inflammation in its neighbourhood. It is to the internal variety of hæmorrhoids rather than the external that the tendency to bleeding belongs. The comparative exemption of the latter from hæmorrhage is probably owing to the thicker and more solid covering of the skin; while the mucous investment of the internal piles is in some cases exceedingly attenuated,—so much so that the vascular growths seem bare, at the same time that these are subjected when prolapsed to the strangulating effect of the sphincter: another reason for the hæmorrhage.

The acute inflammation of external hæmorrhoids is treated as would be the same condition in other parts. To what I have said in a former lecture respecting the management, general and local, of hæmorrhoids in a state of inflammation, I would here only add, that, as the suffering is so much greater than the same amount of inflammation would excite elsewhere, (except probably when the eye and ear are concerned,) you ought to be especially careful in superintending the arrangement of the proper appliances. All the applications,—the poultice, the spongio-piline, and so forth, with their proper application and support—small matters as these may be regarded—are as much the care of the surgeon as the steps of a "great" surgical operation. So indeed is everything which tends to abridge the suffering of a patient. As the inflammation ends, the veins shrink, and there is, after a first attack, little other remains of the previous swelling than the fold of skin of, it may be, larger size than natural (Case *d*); but by repeated attacks the twisted vessels are thickened and at the same time united into a lump by new deposit, and thus a permanent enlargement is formed.

When a clot of blood is contained in a large dilated vein, the termination will be the same as that described in the last statement. The blood is gradually altered, becomes adherent to the vessel; this is obliterated, and the whole shrinks into a small compass of little more than cellular structure. The cure is expedited in this case by laying the lump open. I do not, however, advise that the person should, even after this trifling operation, be allowed to walk about, as in Case *a*. Hæmorrhage to some extent may occur, (Case *b*); not indeed so as to be a source of uneasiness, but still enough to give the appearance of bleeding in the dress of the patient, or to cause inconvenience, even faintness, in a delicate person.

The little abscess which forms in connexion with external hæmorrhoids, will sometimes continue a long time unhealed if left to itself. It is to be freely laid open (Case *c*), or the little swelling, when it is the only disease, may be removed altogether with a pair of scissors. It must be remembered, that any meddling with even such small swellings as have been here adverted to, is attended with much pain; and anything that is to be done, must be done with full preparation against failure from the restlessness of the patient. The use of chloroform may be required, even for these small operations, in some nervous persons.

The removal of the hæmorrhoids is rendered necessary by the inconvenience of the tumour, or by the frequent recurrence of increased swelling. The plan of the operation is as follows:—While the patient lies on one side upon the edge of a bed or couch, and an assistant separates the nates, the swelling, with its cutaneous covering, is raised with a pair of suitable forceps, or a vulcellum, and the whole is removed in a longitudinal fold, with a pair of firm scissors, curved on the side and blunt at the end. Caution is necessary as to the extent of skin that is removed, for if this should be too freely taken away, the orifice of the bowel may be narrowed so as to produce inconvenience afterwards. For this reason, I have, in a case where the tumours were unusually large, turned back the skin before proceeding to the extirpation; but to this point reference will again be made when prolapsus is under our consideration. It is not allowable, in any case, to include in a ligature the external hæmorrhoid, together with the skin that covers it. Such an operation would give rise to extreme suffering, and might even compromise the life of the patient. The hæmorrhage which usually accompanies the operation may be arrested in the usual manner, viz., by tying the little arteries that bleed; but bleeding is liable to come on in an hour or two, or even later, and the application of a ligature at this time is productive of great pain. The influence of the chloroform has then passed off; moreover, it is in every way unpleasant, especially in private practice, or in the case of female patients, to have to return to an operation. It is on these accounts that I have sought to avoid the need of any further process, by passing at once a pin through the bleeding part, and over the ends of this a few turns of ligature with sufficient tightness to control hæmorrhage—using, in fact, "a point of interrupted suture." A scrap of lint is inserted in the wound, if it be desired to prevent immediate union. The pin is withdrawn in twenty-four or forty-eight hours. When first led to have recourse to this expedient by the necessities of a particular case, in which I performed the operation with but little assistance,—a nervous lady being the patient,—I used the hare-lip pin in common use, but since then I have had one constructed for the purpose. This is blunt at both ends, has a moveable point, like the hare-lip pin formerly used, and a hole or eye at one end, into which a thread is inserted to assist the removal of the pin. The object is, that this should not prick the integument in the neighbourhood—gathered in, as all is here, with the sphincter—and that it may be withdrawn, even though hidden when the parts are swollen with the œdema which follows the operation. To facilitate its removal, the pin is to be inserted as much in a longitudinal direction as possible.

In the works of some writers of authority will be found strong objections to the use of the ligature in the treatment of hæmorrhoids, and in other works objections equally strong are raised against excision. The observations I have made will lead you to the conclusion, that my own objection to each of these means is of the strongest kind, unless when used in the form of the disease to which it is adapted, — excision being inapplicable to the internal hæmorrhoid, and the ligature to the external. But, if means should be taken to prevent the evils of these operations respectively, namely, hæmorrhage in the former, and inclusion of the skin in the latter, then the objection falls to the ground. Accordingly, the internal hæmorrhoid may with safety be excised—snipped away with a pair of scissors, if the pin I have before described be inserted, and a thread drawn over it, so as to guard against bleeding. With the string attached to it, the pin is to be drawn away in two or three days. The same end may be attained by various other means. So likewise the external hæmorrhoid may be tied without ill consequence, provided the skin be completely divided in the track of the ligature before this is drawn tight, in the manner exemplified in the case of Galliome *(f)* above narrated.

Other means than those recommended in these lectures have been used for the removal of hæmorrhoids, viz., the actual cautery and a mineral acid—the nitric acid. The latter, I believe, to be a useful application. I have often found it so in the treatment of some forms of nævus, but as I do not like changing from what I have long found an effective and safe plan of treatment, I have not hitherto used the acid, or any similar application, for the cure of hæmorrhoids. As regards the actual cautery, I am desirous to mention, that a very ingenious method of applying it has lately been introduced by Mr. Marshall, of this hospital; and whenever it is desired to remove hæmorrhoids by this process—i.e., by

searing them off—I am satisfied that Mr. Marshall's plan is the most convenient form of effecting the object. According to this plan, the wires which are used are heated by means of a galvanic battery.

Hæmorrhoids Complicated with other Disease.

So far the hæmorrhoid has been considered as existing without any other serious ailment, except such as might be regarded as a consequence or an ordinary accompaniment of the disease of the rectum; we shall close this part of our subject with an inquiry into the proper mode of proceeding when disease affecting some important organ exists at the same time with that in the bowel. From the oldest times it has been a common belief, if not a medical dogma, that losses of blood under the circumstances just indicated are salutary; that, at all events, they prevent matters from getting worse as regards the disorders we suppose to exist elsewhere, and ought not to be arrested. For all such general impressions or traditions in the Profession, there is, we are inclined to believe, some reasonable foundation; and yet we ought not, in a matter of such great importance, to be guided merely by impressions, however generally they may be entertained. Our conclusions ought to be drawn from facts—from cases carefully observed and put together. I apprehend that the opinion entertained respecting the healthful influence of fluxes of blood arose and continued to be strongly held, when the abstraction of blood was largely used as a remedy for actual disease. I well remember, when I began to climb the first "rounds" of the professional ladder, that no small portion of my time was engaged in bleeding—venesection or phlebotomy, and arteriotomy, as the operations were called—and few patients having any appearance of excited action about them escaped without being "let blood." But the practice of the Profession, in this regard, has been much changed; and now a Dresser is seldom called upon to use his lancet, except, perhaps, for the purpose of opening an abscess. Leeches, indeed, are applied, and the Cupper is in requisition at times, but the lancet is comparatively little resorted to. May it not be, then, that impressions which have come down to us from a period when the large abstraction of blood as a remedy for disease was considered necessary, should require revision when the opinion and practice in this respect have been much modified? I would not imply, that the prevailing impression respecting discharges of blood should, because of the change in opinion adverted to, be necessarily erroneous; I would merely suggest, that the question we are engaged in discussing must be decided irrespectively of any general notion by reference to observation only. But much caution is required in removing all sources of error, as well as insufficiency from observations, in order to make them useful for our purpose. Take an example:—I had known a young lady from the earliest age, who, when she grew up, became much distressed with bleeding hæmorrhoids and constipation. She often had at the same time a loud barking cough. Her chest was rather narrow, but there was no loss of flesh, and she possessed a good deal of strength and vigour. Distressed, however, by the frequent recurrence of bleeding from the hæmorrhoids, and pain as well, she applied to an eminent surgeon in a metropolitan city, and the hæmorrhoids were removed. Afterwards the loud cough continued and increased, and in three years from the cessation of the bleeding from the rectum, this lady died of phthisis. These are facts, and all that are known to me, as bearing upon the history of the illness; but, with only such a statement of the facts, we cannot draw any inference from the case. All the circumstances intermediate to the surgeon's operation and the active development of phthisis are wanting. Moreover, we do not know from any well-observed examples, that the loss of blood will prevent the active growth of tubercular disease, any more than it would cure it, or influence it in any stage of its progress. In short, cases to be of service for our present object, must have been well known before the arrest of the hæmorrhoidal discharge, and must be under observation and control during some considerable time afterwards. But to obtain the history of such is a matter of difficulty. In an hospital, the operation is performed, and the patient is commonly not seen again; or, if he should again come under the notice of the surgeon, it is probably after exposure to circumstances which in themselves are sufficient to produce disease, apart from all reference to the previous hæmorrhoidal affection. From this it follows, that the means of arriving at assured conclusions in the experience of any one person must be scanty; but every contribution towards this result has its value.

So much being premised, I will now read brief abstracts of two cases which I saw in consultation with my distinguished friend, Dr. Arnott, some years ago. They were both under his observation and professional direction before that time, and they have been so since then. To him I owe an account of their condition since the hæmorrhoidal disease was removed, as well as previously to the operation.

Internal Hæmorrhoids attended with Losses of Blood and Pain—Frequent Hepatic Derangement - Jaundice—Erysipelas—Report of Health 7½ Years after Cure of Hæmorrhoids.

Mrs. ———, a lady of florid complexion, now aged about 65, who had been suffering for some years with frequent attacks of internal hæmorrhoids, accompanied with prolapsus and bleeding, came under my observation in the summer of 1844, when this note was made of her case.—The return of the prolapsed bowel is always difficult, and attended with much suffering, and the patient is confined to her bed for a considerable period during the hæmorrhoidal attacks.

This lady is very subject to fulness and giddiness of the head, and this distress subsides when the hæmorrhoidal discharge comes on. She has likewise often had erysipelas of the head and face. The hepatic function, too, has been frequently deranged; and more than once there has been complete jaundice. Such was the history of the case, not at a remote period, but immediately before the treatment of the hæmorrhoidal disease.

Upon examination of the rectum after it had been prolapsed by the action of an aperient, several hæmorrhoids were found projecting from it. As it was evident to Dr. Arnott and myself, that, unless this malady was relieved, the patient must remain liable to very frequent returns of suffering, which lately had continued for long periods, and to all the depression of health that must result from this, as well as from losses of blood, we decided upon removing the hæmorrhoids, in so far as might be necessary to prevent prolapsus of the mucous membrane. But it was thought prudent to proceed cautiously with the operation, in consideration of the disordered state of the patient's system. Accordingly, on the 13th June, two double ligatures were applied; and in a month after, (11th July,) as, though a decided improvement had taken place, there was still some remains of prolapsion, two more were used.

Since that time the patient has had, at intervals, attacks of her old head-complaint, and the application of a few leeches has, on more than one occasion, formed part of the treatment resorted to by her physician. Under his advice, she has abstained wholly from the use of ordinary stimuli. The relief afforded by the treatment of the hæmorrhoids has been complete, in so far as this malady in itself is concerned, and, what is very material, the stoppage of the discharges of blood has not been attended with any injurious effect to countervail this benefit. After the lapse of nearly eight years from the operation, the lady is now (January, 1852) in comparatively good health.

Ovarian Tumour—Hæmorrhoids, with Losses of Blood, Cured—No Increase of Ovarian Disease—Report Five Years after Treatment.

A lady, now arrived at about the age of 50 years, had long been annoyed with hæmorrhoids, accompanied with painful prolapsion and discharges of blood; and, though a person of very strong mind, she was, in consequence, pale, nervous, and anxious. There was also an ovarian tumour, which, when I saw the patient, (April, 1847,) was as large as an ostrich's egg. The latter disease had been then in existence for ten years. For a period of between two and three years the tumour had been steadily increasing in size; but Dr. Arnott had had pressure applied over it with a very ingeniously contrived apparatus, and the arrest of its growth, which took place before my assistance was required, was believed by the patient to have been the effect of the treatment.

The hæmorrhoids were both within and without the sphincter. It was from those in the former position that the bleeding proceeded. Three ligatures were applied, with the effect of preventing the prolapsion and hæmorrhage. But subsequently, the inconvenience arising from the subcutaneous tumours being such as to prevent the patient from

sitting with comfort, and still more from riding in her carriage without much distress, even though she had been provided with pillows and other suitable additions to the carriage cushion, three external hæmorrhoids were excised, and pins with the ligatures were at once applied, in the places of two of these, in which there was active bleeding from small arteries. The pins were removed on the following day. This, I may add, was the first case in which I resorted to the use of this expedient for preventing hæmorrhage. This lady has, since the operation, been wholly free from hæmorrhage, and she has not suffered any inconvenience in the situation of the hæmorrhoids, except once, and to a slight amount, a couple of years ago. Notwithstanding the presence of the ovarian tumour, and the effect it might be supposed calculated to exercise in inducing a return of the hæmorrhoidal complaint, her health is now good, (Jan. 1852.) Moreover, the ovarian disease has not increased in size during the five years that have elapsed since the removal of the hæmorrhoids, and therewith the entire suppression of the discharge of blood. It should be stated, that the menstrual function still continues in a healthy state.

Comments on the foregoing cases are scarcely necessary, and I will only shortly say respecting the management of cases in any degree similar, that if the hæmorrhoidal complaint be in itself a source of distress, and the bleeding take place in an amount to impair health, the resort to treatment with a view to its removal is required. But the patient must be afterwards well watched, the diet regulated, stimulants in a great measure if not wholly disallowed; and if any inflammatory disease should arise, the abstraction of blood will probably be requisite in circumstances in which otherwise it would not be thought necessary.

ORIGINAL COMMUNICATIONS.

ON DISEASES OF THE CHEST,

SUPERVENING ON ACCIDENTS AND OPERATIONS.

By PEYTON BLAKISTON, M.D., F.R.S.,
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In the following paper, I purpose offering some remarks on the principal diseases of the chest, which were seen to supervene on accidents and operations, as observed, a few years since, in the wards of the Birmingham General Hospital. Examining successively the symptoms which were exhibited during life-time, and the anatomical characters which were revealed after death, I shall endeavour to ascertain the peculiar nature of the affections thus occurring, with the object of deducing sound views of preventive and curative treatment. Those which I shall notice are pericarditis, pleuritis, pneumonia, phthisis pulmonalis, and purulent deposits in the lungs.

SYMPTOMS AND ANATOMICAL CHARACTERS.

Pericarditis.—The symptoms of the invasion of pericarditis were almost always obscure, two cases of which are recorded in my work on Diseases of the Chest.(a) The respiration was hurried, and the pulse always accelerated, never full or hard. There was either no pain at all, or else it was so slight as to be described by the patient as a stitch. Attrition sounds, synchronous with the heart's action, were often heard over the præcordial region; but extensive dulness on percussion was very rare. Traces of pericarditis were not very frequently met with after death,—when they were seen, they usually consisted of bands or patches of pale-coloured lymph, with or without a little dirty-coloured serum, in which a greyish lymph floated.

Pleuritis.—In a few cases, pleuritis was ushered in with acute pain, a full hard pulse, and high febrile excitement; and then auscultation and percussion revealed the existence of fluid sometimes extensively and rapidly effused. These were the exceptional cases; in general, the pulse was merely accelerated, there was no increase of fever, and pain, although distinctly present, was slight and fugitive, such as is seen in the course of phthisis pulmonalis. In this class of cases, attrition sounds were frequently heard over different parts of the chest, but no extensive dulness was perceived on percussion. Thus the symptoms, in the great majority of instances, pointed out the nature of the attack as equally removed from acute idiopathic pleurisy, and from chronic pleurisy with effusion, many of the latter of which occur without pain.

In those few cases in which, during life-time, the symptoms of inflammation had run high, bright primrose-coloured lymph was found after death, floating in turbid serum. In the great majority of cases, however, when lymph was thrown out, it inclined to a grey colour, and the serum resembled whey, the membrane being semi-opaque, mottled, and sometimes thickened, just as is seen in cases of puerperal peritonitis. Often greyish dry bands or patches of lymph alone were seen.

Pneumonia.—The indications of the presence of pneumonia were in nearly every case faint. Heat of skin was not observed, nor were ferruginous-coloured sputa seen; but simply those general symptoms which might have arisen from slight bronchitis. Such being the insidious nature of the approaches of this disease, it not unfrequently happened that auscultation was either never employed, or at least not until some time after the invasion; and occasionally, owing to the nature of the accident, the patient could not be moved in such a manner as to afford access to the back part of the thorax, which was the most common seat of pneumonia. When, however, the ear was applied, rarely any moist rattles were heard, but dulness on percussion was perceived, often coming on very rapidly unpreceded by crepitant rattle.

On a *post-mortem* examination, pneumonia was hardly ever found to have passed the second stage, yellow softening being very seldom found. In general, the affected portion of the lung presented the dark-purple mottled appearance which is seen when pneumonia has come on during the course of another illness, being also often much drier than in acute primary pneumonia, indicating the preponderance of the plastic form of effusion. In one case(a) only diffused gangrenous pneumonia was discovered, which came on after a cut throat. There was, therefore, a striking similarity, both in respect to symptoms and anatomical character, between the pneumonia which occurred in these cases and that which sets in during the progress of typhus fever.

Phthisis Pulmonalis.—I have elsewhere(b) recorded a case in which phthisis pulmonalis came on in the acute form after a serious accident, and suffocated the patient, but it is the only one of the kind I have seen, and there were evidences of the previous existence of tubercular cachexia. Nor did I ever see a case commence after accident or operation in the laryngeal or the hæmoptical form of invasion. In general, the disease made its first appearance either in the bronchitic or the latent congestive form, both of these, especially the latter, being slow in progress and asthenic in character.

After death, in some cases, which had been protracted to an unusual length, semi-transparent grey matter was found in the lungs in small sized masses, but more frequently in the form of granulations, in which the commencement of yellow tuberculisation was often apparent. In other cases, tubercular cavities were found; but the above-mentioned case is the only one in which the lungs were stuffed full of grey granulations and crude tubercles.

Purulent Deposit in the Lungs.—For some years I examined with great care every case in which there was cause for suspecting the existence of purulent deposits in the lungs. The only general signs which were *constantly* observed were profuse perspiration and hurried respiration, and when these both occurred, and no traces of any other pulmonary affection could be discovered, such as might account for the acceleration of the respiration, death ensued, and purulent deposits were discovered in the lungs. Now and then cooing or sub-crepitant rattles were heard, re-

(a) Pages 229 and 230.

(a) Diseases of Chest, by the Author, p. 281.
(b) *Op. cit.*, p. 335.

sulting, doubtless, from slight bronchitis, but there were no auscultatory signs constantly present, or in any way indicative of the presence of purulent deposits in the lungs. The pus deposited was invariably of a bright primrose colour. It should also be mentioned, that the patients for some time previous to their death were in a decidedly adynamic state, and the same was remarked by my late distinguished colleague, Mr. Hodgson.

It may be inferred from these observations on the symptoms and anatomical characters of chest diseases supervening on accidents and operations, that, in my experience, the great majority of them are of a decidedly adynamic nature. In this respect they resemble the diseases which follow parturition, and those which arise in the course of typhus fever. And it is natural that it should be so, because the system is reduced to a similar state in all these cases. In all a shock takes place, in one case produced by parturition, in another by the accident, and in the third by the action of poisonous miasma, while debility is frequently increased by great losses of blood. To this may be added the depression arising from the loss of out-door air and exercise, and the tendency to congestion of the internal organs induced by the recumbent posture.

The character, also, of these diseases resembles that of diseases of other parts of the body, which take place under similar circumstances, such as puerperal peritonitis, delirium tremens, occurring in constitutions broken down by intemperance, erythematous inflammations, and erysipelas; all of which, it is universally allowed, present an adynamic form. Indeed, I think, few would feel disposed to question the accuracy of the remark, that the greater number of the diseases of all kinds which supervene on severe accidents and operations present the adynamic form here insisted on.

TREATMENT.

It now only remains to endeavour to extract some practical rules for the *prevention* and *removal* of this class of diseases.

Prevention.—The time is not very remote when the preparation of the patient for important operations consisted of venesection, purging, and low diet; and if an operation, such as amputation, took place shortly after an accident, copious hæmorrhage from the vessels was rather encouraged than otherwise, with a view to prevent subsequent inflammation. Led, in some degree, by this ill-chosen word to regard the process it is used to denote, as a burning flame which could only be extinguished or controlled by a lowering plan of treatment, and not having carefully studied its leading phenomena, the surgeon could have been little aware that the great majority of inflammatory attacks were of a passive, asthenic nature, such as has been seen to be the case in the class of diseases under consideration. It may be contended, that such a line of preparatory treatment, although not calculated to prevent the occurrence of these particular diseases, is well adapted to preserve in a healthy state the wounds caused by accidents or operations, and to make them heal favourably. This is a point which I do not feel myself competent to decide, but the authority of some of the most eminent surgeons attests that this lowering treatment is not only unnecessary, but hurtful, and that, in fact, wounds much more frequently present an unhealthy appearance from the system being too low, than from its being in an opposite state. It has, indeed, been remarked by some of large experience, that the longer they have lived the more careful have they become to husband every drop of blood at an operation. It follows, therefore, that the treatment best suited to ward off secondary chest affections, is such as is calculated to preserve the health at its full average standard; bloodletting being only employed when there is a considerable tension of the vessels, and then in a very guarded manner; giving the preference to local over general depletion, and using every effort to prevent unnecessary loss of blood from wounded vessels; purgatives being only administered for the purpose of gently relieving the bowels, and preventing or removing congestion of the abdominal viscera; the patients having been lodged in large, well-ventilated, and thinly inhabited apartments, and placed on a light, nutritious diet, embracing an amount of stimulant drink proportioned to their previous habits, so that a healthy blood plasma may be formed with little effort of the digestive organs. The chest, also, should be frequently and carefully examined for the purpose of detecting the earliest approaches of these diseases, some of which have been shown to be very insidious, and difficult of discovery, and also in order that the state of the vital forces may be ascertained from the strength of the heart's action, as indicated by the intensity of its systolic sound, so that in the event of any decrease in its power being detected, the period of collapse may be anticipated, as in typhus fever, and ammonia, wine, or quinine, may be administered without waiting for those outward manifestations which attend the further stages of exhaustion.

A modification, however, of this prophylactic treatment may be required when the nature of the accident is such as to lead to the fear that acute sthenic inflammation may speedily set in, such as meningitis after injury of the head, pleuritis after that of the thorax, or peritonitis after a wound of the abdomen. But even in these cases depletion is seldom called for, the preventive treatment consisting rather in the exhibition of mercury in some shape or other, with perhaps the application of leeches or the cupping-glass.

Now, if such be the appropriate treatment for warding off the inflammatory attacks here treated of, by so much the more is it adapted to prevent tubercular deposits taking place; for it is well established, that an asthenic state of the system is that in which there is a peculiar tendency either to the direct deposit of yellow tubercle, or to that of grey matter resembling the typhic deposit of Vogel in its histological character, and which, I have given reasons(a) for believing, degenerates into yellow tubercle when the vital forces are at a low ebb, and when the metamorphosis of tissue is proportionately weakened.

Removal.—In the treatment of these diseases, when they have come on, we must, of course, bear in mind the facts just adverted to. Antimony is not so well borne as in primary pneumonia, even when in a typhoid form; but mercury and opium are our chief remedies, while ammonia, quinine, wine, etc., are freely given, so as to support the vital forces. Indeed, I have frequently seen secondary pneumonia yield to opium and stimulants. So, too, secondary pleuritis and pericarditis will hardly ever require even local depletion, but will be best met by mercurial and opiate frictions, the system being at the same time well sustained. It would be useless to touch on the treatment of phthisis occurring under these circumstances, as no material alteration in the usual tonic and sedative treatment is called for. It would be equally useless to propose remedies for purulent deposits in the lungs, because, whenever the symptoms have been so well marked as to lead to a strong belief that they had taken place, the cases in my experience have all terminated in death.

It is almost unnecessary to remark, that the principles of treatment here shown to be applicable to this class of diseases supervening on accidents which have occurred to persons in good health must, *à fortiori*, be suitable when the subjects of such accidents were previously labouring under strumous cachexia, or any form of chronic disease.

It may by some be considered superfluous to have advocated these views at a time when they are held and taught by some of the most distinguished surgeons of the day. But, on the other hand, I venture to assert, that there is a large number of practitioners in different parts of the country who do not adopt these views, or at least who carry them out too timidly in practice.

Surely, then, a subject of such practical and vital importance cannot be too often or too prominently brought before the notice of the Profession, in order that the correct treatment may be firmly established and steadily pursued. The interests of the community demand the diffusion and general reception, no less than the discovery, of the truth; and my object will be fully answered if I shall have done anything towards extending views of the nature and treatment of these diseases which I believe to be of much importance in practice.

St. Leonard's, Hastings.

[We beg to call the attention of practical men to the above condensed but able statement of the experience of a distinguished physician, relative to that highly-important class of chest diseases which supervene, often insidiously, on accidents and operations. The large sphere of observation which the author so long enjoyed, and his well-known accuracy and acuteness, render his remarks peculiarly valuable.—Ed. *Med. Times and Gazette.*]

(a) Diseases of the Chest, p. 297.

CASES OF DISEASED BONE.

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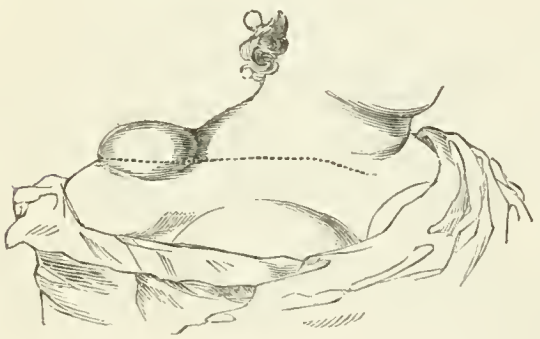
I am induced to publish the following cases, as they appear to me to contain some peculiar points of interest and instruction in connexion with the subject of bone disease. Osseous tumours often present more or less difficulty to the surgeon in forming a correct diagnosis; and these cases seem to me illustrative of important varieties of morbid osseous developments.

EXCISION OF THE OUTER HALF OF THE CLAVICLE.

On October 15, a girl, named Eliza Marshall, was admitted into Guy's Hospital with a tumour upon the external half of the right clavicle. The patient is 14 years of age, with dark hair and an intelligent countenance, but of rather strumous appearance. The catamenia have not yet appeared, although the mammæ are unusually developed. She states that her general health has been good. She has been a domestic servant. About twelve months since, while cleaning a window, she accidentally struck her shoulder against the edge of the window-frame; the blow was not very severe, and it gave her but little uneasiness at the moment, although afterwards she experienced a peculiar throbbing sensation in the part, but there was no local inflammation. Two months after the accident had happened, a firm swelling began to show itself at the point where the shoulder was struck. This swelling was very painful, and prevented her from using her arm; the pain was not, however, constant, but appeared to diminish and return again almost periodically, a month perhaps intervening between the attacks. The swelling itself has continued gradually to increase ever since she received the blow. When she came into the hospital there was a round, hardened swelling, about the size of an orange, situated, as was stated at first, over the coracoid process of the scapula, and extending along the outer half of the clavicle. *Vide Fig.* 1.

Fig. 1.



It was slightly painful when pressed upon firmly, and there was some redness of the skin covering the tumour; but this might have arisen from her having applied some vinegar to it, or from the manipulation to which it had been subjected. The tumour seemed to be deeply seated, and to be firmly fixed to the clavicle and subcutaneous tissues; it presented no indications of being either steatoma, encysted tumour, abscess, or glandular enlargement; in fact, all its characters served to stamp it as arising from a malignant adventitious growth; it was therefore thought right to extirpate it without delay, and accordingly the operation was performed on the 21st Oct. When the clavicle was reached it was found that the tumour was firmly adherent to it, and there was some difficulty in dissecting it off. Upon the clavicle being laid bare, it was discovered that it had been fractured, which was probably done (although unknown to the patient) when it was struck against the window. The night after the operation she passed indifferently, although she had but little pain; there was a slight oozing of blood from the wound; the skin was hot and dry, and the tongue slightly furred. She took some tea and toast for breakfast. On the 23rd she had passed a better night, but the wound was not looking very well, and there was a slight erysipelatous blush around it. The patient fainted on being taken out of bed; she was therefore ordered some slight stimulus. The fever had somewhat subsided, but her tongue was still furred; pulse 140; bowels not opened for two days.

24th.—The patient was altogether better to-day; the blush around the wound had quite disappeared, but the granulations were looking pale and flabby. She was ordered mist. salin. c. Pulse 120, and small.

25th, 26th, 27th, and 28th.—Continued to improve. Ordered

Quinæ disulph. gr. ij.; acid. sulph. dil. ɱv.; syr. aurantii ʒj.; tinct. hyoscyami gtt. xv.; aquæ ʒj.; bis die. Also a pint of porter.

31st.—Complained of griping pains in the bowels, but was quite well in other respects.

November 19.—With the exception of feeling rather faint and giddy at times, the patient went on favourably up to that date. The wound had also been healing kindly, but it had now become very sluggish; her general health was, however, very good.

29th.—Had still continued to go on well, and, the wound having healed and her strength being re-established, she was discharged apparently cured on that date. Unfortunately the convalescence was but of short duration, for in about a week after her discharge from the hospital the patient began to perceive evidences of a renewed growth beneath the cicatrix, and in the course of three weeks a tumour of sufficient size had formed to render it advisable to again receive her into the hospital. The seat of the second tumour was as nearly as possible the same as that of the first, but the abnormal growth was more extensive, having a broad base, and appearing to increase by spreading itself out rather than by rising above the surface. It was not tender to the touch, nor was it generally painful. It continued to increase with rapidity, and after the girl had been in the hospital about a fortnight the diameter of its base was not less than three or three and a half inches. Externally, it resembled in every respect the first tumour, but it now possessed a greater tendency to increase rapidly; it was, therefore, apparent that a second operation would be immediately required. Although, in examining the structure of the tumour removed at first, I had concluded that it was a malignant disease, and was supported in this view by the opinion of Mr. Quekett, I could not altogether relinquish the hope that, in the fracture of the clavicle, the rugged extremities of the broken bone might have in some way interfered with the process of reparation, and so a morbid growth might have been set up, apparently possessing some of the characters of a malignant development; but, not being so dangerous to life, at all events, I thought it right to give the patient the chance of the disease being effectually removed; and I was perhaps influenced in my determination by the circumstance, that she was in good health generally, and that therefore, with respect to the mere operation, there was not much to be feared. Upon further considering the subject, it became obvious to my mind, that, in order to ensure the entire removal of the diseased mass, it would be useless to attempt to dissect it away from the bone, as in the first operation, and I consequently decided upon removing the outer half of the clavicle with the adherent tumour, sawing the bone through at about its centre, and disarticulating it from its connexion with the scapula.

On Tuesday, the 4th of January, I performed the operation. The patient was placed under the influence of chloroform, and I commenced an incision on the sternal side of the centre of the clavicle, and continued it along the clavicle until I reached the tumour. I then deviated from a straight line, continuing to divide the skin in a curved direction, passing round above the old cicatrix, and terminating the cut just over the acromion process. In making the second incision, I began, in the first, on the sternal side of the tumour, and passed the knife in a slightly curved direction in front of and below the cicatrix, the course of the knife being almost parallel with the line of the clavicle itself. The second incision was made to terminate at the acromion, at the same point as the first. These incisions comprehended an elliptical space, which enclosed the whole of the old cicatrix. I next dissected the skin off the tumour; that towards the shoulder and neck being dissected upwards and backwards, and that of the pectoral region, which lay below the tumour, downwards and forwards. By this step the tumour was completely exposed. I now dissected away the

tissues connected with the clavicle, at the point in which I commenced the first incision; when the bone was rendered quite free for a limited space on every side, I passed a chain saw beneath it, and cut it through. A piece of strong silk was next fastened firmly to the truncated extremity of the external portion of the clavicle, and this enabled an assistant to raise the bone and tumour up from the subjacent tissues, which were then dissected away until the acromion process of the scapula was reached; the clavicle was then disarticulated from the scapula, the remaining slight attachments to the soft parts being divided to permit of its entire removal. The bleeding during the operation was very considerable, but it proceeded more from the general vascularity of the tumour than from any large vessels having been divided; consequently, it soon stopped when the operation was completed, without the necessity for the application of many ligatures. I have mentioned that, in the first step of the operation, a portion of the skin covering the tumour was excised, to remove the cicatrix of the former wound. The effect of this was to diminish somewhat inconveniently the quantity of skin left to cover the wound; for, although the edges of the skin could be easily brought into coaptation immediately after the operation, in the course of two or three days it had contracted so much as to leave a considerable space to be filled up by granulation. For the first few days, the patient suffered from great prostration and irritative fever, and also from severe pain in the shoulder and region of the clavicle; the symptoms were not, however, alarming, nor I think very violent, considering the importance and extent of the operation. After the fourth or fifth day, the symptoms of constitutional disturbance subsided; and from that time to the present she has continued gradually to improve.

The most remarkable circumstance connected with the history of this case is, that so slight a local injury as that described should prove the exciting cause of such extensive disease. There had existed no previous constitutional symptoms which could have led to the supposition that this patient was the subject of a malignant taint; yet, from the account which she gave of the accident, there can be no doubt that it was the means of producing the fracture afterwards discovered in the clavicle, and which apparently preceded the development of the abnormal growth; but to account for the bone giving way under the operation of so comparatively trifling a blow, we can only suppose it to have been previously in a diseased state, which had rendered it unnaturally fragile. Such a condition of the whole or parts of the osseous system is not very unfrequent, and may, I presume, be confined to a particular bone, arising, perhaps, from some deterioration essentially local. Under the microscope, this tumour presented all the appearances which are considered to indicate malignant disease; but I believe it is very difficult by means of the microscope to distinguish exudation corpuscles resulting from a protracted irritation or a strumous diathesis from the effusions in malignant development. All this leaves the question of the malignant character of this tumour in a state of doubt; and I am still hopeful that judicious constitutional treatment, now that the local source of irritation is so completely removed, may be effectual in so far elevating the vital powers of the patient as to prevent a similar local deterioration from again manifesting itself.

[To be continued.]

CASES IN OPHTHALMIC PRACTICE.

By WHITE COOPER, Esq., F.R.C.S.,

Ophthalmic Surgeon to St. Mary's Hospital, &c.

ACUTE SCLERO-IRITIS, AND PENETRATING ULCER OF THE CORNEA, COMPLICATED WITH DISTICHIASIS.

Case 1.—J. C.—, aged 30, an active wiry man, by trade a wine-cooper, was sent to me on the 29th of November, 1851, by my colleague, Mr. Samuel Lane. Both eyes presented well-marked examples of distichiasis. In addition to the natural row of eyelashes, which was complete, there were projecting from the free surface of the edge of each upper lid a group of long hairs, fine in the left, but strong and bristly in the right. He was uncertain how long this condition had existed, but the false lashes had been a source of torment during the last five years. A fortnight before I saw him the right eye had been attacked by inflammation, the result of cold, which, in spite of treatment had continued to increase, and on examination the appearances presented were as follow:—The conjunctiva and sclerotic were intensely inflamed; there was a deep ulcer, which had penetrated nearly through the substance of the cornea, near its centre, and the inner half of this membrane was hazy, from deposit of lymph. The iris displayed all the characteristics of acute inflammation; the pupil was irregular, and the anterior chamber partially filled with pus. In addition to the pain in the eye and hemicrania symptomatic of this inflammation, the patient complained of acute pain from the rough points of the pseudo-cilia brushing against the inflamed and highly sensitive organ. In fact, so sharp were the pangs, that he frequently started in my presence, as the lid swept the cornea in the act of winking.

It was clearly vain to expect that the inflammation could be subdued while this distressing source of irritation existed, and I thus proceeded to remove it. Having, with a camel's-hair pencil, traced a line from the outer side of the punctum to the middle of the lid, about the eighth of an inch from, and parallel with, its margin, an ivory spatula was placed beneath the lid, which was put on the stretch by Mr. Lane. The integuments and fibres of the orbicularis were then dissected from the tarsal cartilage, and every hair-bulb carefully removed. The wound was closed by three fine sutures passed through the margin of the cartilage and the integuments. Cold-water dressing was directed to be applied to the wound so long as it was agreeable; and two grains of calomel, with the fourth of a grain of opium, to be taken twice daily.

Dec. 1.—The sutures were removed, and the wound in the lid was found to be nearly healed: the hypopyon had, however, increased, and the patient complained much of the suffering in the eye and head.

6th.—The ulcer had penetrated through the cornea, evacuating pus and aqueous humour; and the iris lay in contact with the cornea, the pupil being much contracted. The patient was not yet under the influence of mercury, and the inflammation of the eye continued nearly the same. It was of importance to prevent the iris becoming adherent to the cornea; the wound was therefore lightly touched with nitrate of silver, and belladonna freely applied to the brow. The patient was clearly below par, with a rapid feeble pulse, and cold extremities. He was, therefore, directed to take five grains of pulvis cinchonæ cum sodæ twice daily, and half a pint of porter with his dinner; the eye to be frequently fomented with a collyrium containing 12 grains of extract of belladonna and 18 grains of opium to 8 ounces of water; the ulcer to be touched, night and morning, with a solution of nitrate of silver, 2 grains to the ounce.

9th.—A very great improvement was manifest. The inflammation had greatly diminished, the ulcer had nearly filled up, and the opaque portion of the cornea had become much clearer. The tonics and generous diet to be continued. The patient being moderately under the mercurial influence, hydrarg. c. creta was substituted for the calomel.

13th.—The iris had recovered its natural position, the cornea had nearly cleared, and the iritis had disappeared. The ulcer was healing rapidly. The mercurials were now discontinued, but the other treatment was persevered with.

It is unnecessary to trace the further progress of this case periodically; the bark and soda was alternated with quinine and iron, and the ulcer was occasionally touched with a solution of nitrate of silver. The eye has quite recovered, with the exception of an opaque spot indicating the seat of the ulcer, but that is diminishing, and interferes little with vision. The man expresses himself as feeling greater comfort than he had known for years, being free from the annoyance of the irritating cilia.

Remarks.—This case illustrates well the importance of removing sources of external irritation in cases of inflammation of the eye. Depletion, mercury, and other treatment had been judiciously but ineffectually employed during three weeks, and there can be no doubt, that had not the pseudo-cilia been extirpated, the case would have gone on from bad to worse until the organ was destroyed. The effect of the first course of mercury had passed away when the patient came under my care, and difficulty was experienced in bringing him again under its influence. I attribute this

principally to debility. Dr. Billing considers mercury to be tonic in its effect, acting specifically on the capillaries, giving them tone to contract analogous to the action of an astringent applied to an external sore; but a certain amount of systemic power is necessary for mercury to develop its full effect, and it was interesting to mark in this case how its effect became evident as vigour was imparted to the system by improved diet with tonics, and how rapidly the disease gave way when the mercurial influence was established.

The patient stated, that a gush of water had taken place from his eye about an hour before I saw him on the 6th. I have no doubt that this indicated the moment when the ulcer, having penetrated the last lamina of the cornea, gave exit to the contents of the anterior chamber. I was fortunate in meeting with him so soon after. The pupil was at that time so contracted as to be scarcely visible, and the iris lined the cornea. It was of the utmost consequence to fill the breach as soon as possible, and to prevent the iris becoming adherent to the wound; the first object was attained by exciting the reparative process with nitrate of silver; the second, by placing the iris with the least possible delay under the influence of belladonna. I believe, however, that for this drug to produce its special effect, it is necessary for the iris to have its natural support,—the aqueous humour. So long as the anterior chamber is empty, belladonna is of little avail, though the contact of the iris with the cornea hastens the secretion of lymph, binding the two together and effectually stopping the gap, but at the expense of vision. In the present instance, a sufficient quantity of reparative material to fill the breach was poured out before adhesions had formed. The aqueous humour accumulated, then the iris, acknowledging the power of the belladonna, retired into its natural position.

Some writers of authority are of opinion that the pseudocilia in distichiasis, though they issue from a wrong place, and grow in a wrong direction, are merely natural cilia, the bulbs of which have been displaced by disease affecting the border of the eyelid.

On the same day on which the operation already described was performed, a woman presented herself at St. Mary's, with precisely the same affection – a group of cilia growing from the free margin of the left lower lid, and which I removed by a similar, though less extensive operation. A careful examination of these cases confirmed the opinion I had before entertained, that these lashes are quite independent of the natural cilia, than which they are generally much finer. In neither of these cases was there any appearance of lippitudo, chronic inflammation, or other disease of the lid; and both patients asserted that they had never suffered from anything of the sort.

Mr. Wilde, of Dublin, first (I believe) pointed out the advantage of drawing the edges of the wound together after removing the bulbs of the cilia. If this be not done, a raw sensitive spot is left, very liable to be the seat of a troublesome little fungus; whereas, by the use of fine sutures neatly applied, the wound heals by the first intention, and there is neither pain, trouble, nor deformity. The sutures should, however, be removed after about twenty-four hours, or œdematous swelling is apt to follow. A strip of plaster may then be carried from the brow, over the wound, to the cheek, retaining the parts in apposition.

EPICANTHUS, CAUSING TRICHIASIS.

Case 2.—Epicanthus, or the crescentic fold of integument which, in some infants, extends from the nose over the inner corner of the eye, occasionally gives rise to trichiasis, of which I have recently seen a well-marked example in a little patient of Dr. Cormack's, of Putney, concerning whom I was consulted. In this infant, seven months old, the fold of skin concealed the caruncle on either side, and swept downwards and outwards in a curve, losing itself in the cheek beneath the eye. The effect was, to tilt in the margins of the lower lids, bringing the points of the fine eyelashes against the surface of the eye. This might have been expected to cause irritation, but such did not appear to be the case. It was a question as to whether an operation was advisable: Being informed, however, that the condition of the parts had improved since birth, I agreed with Dr. Cormack, that it was unnecessary. There can be little doubt that, as the bridge of the nose rises, the folds will disappear: the lashes will then most probably cease to turn. If, however, a vicious curve has been acquired, operative measures can hereafter be adopted. In many of these slight deformities of early childhood, meddlesome surgery is to be deprecated; time will correct the evil; whereas, by clipping out portions of integument, indelible scars, and perhaps something worse, remain during life. The provident influence of nature is illustrated by the slowness with which the eyes of infants take on inflammation; were it not so, their utter helplessness would frequently be the exciting cause of blemishes; but their eyes are not only perfectly indifferent to slight injuries, and to an amount of tickling from the lashes which would be highly distressing to the eyes of an adult, but I cannot recal to mind a single instance out of a large number which have fallen under my notice where serious inflammation followed the operation, whether through cornea or sclerotic, for congenital cataract.

My friend, Mr. Bowman, has been kind enough to allude, in his able paper on "Artificial Pupil," recently published in this Journal, to an operation of that description performed by me with Sechel's canula forceps. This instrument is, indeed, invaluable in many of the more delicate operations on the eye, of which the following affords an illustration.

EXTRACTION OF A LENS AFTER RECLINATION.

Case 3.—A gentleman, 69 years of age, had undergone the operation of reclination of cataract, in the country, in April last, but the lens had risen again, and, leaning against the iris, had become adherent to the upper margin of the pupil, effectually blocking it up. The patient consulted me in November, by which time absorption of the lens had made considerable progress, and he could, by holding his head much on one side, obtain a glimmering of objects. There was evidently the nucleus of a hard cataract suspended in the pupil by the adhesion, which, moreover, prevented its dilatation by belladonna, rendering the eye useless.

Any attempt at removing the nucleus of the lens out of the field of vision with a needle was likely to fail, it being doubtful whether such an instrument could divide the tough adhesion—(for the toughness of such adhesions is almost incredible)—and even if it did so, it was exceedingly questionable whether the lens would remain clear of the pupil. I therefore preferred to extract it from the eye, and did so on the 13th of November in the following manner:—

The patient being seated in a chair, a puncture was made with Jäger's double-edged iris knife at the lower and outer margin of the cornea. The canula was then cautiously slid between the iris and cornea until it had reached the pupil, when the blades were divaricated, and a firm hold taken of the adhesion. Semi-rotatory traction soon separated this from the iris, but in drawing it, together with the nucleus of the lens, through the wound a portion of iris prolapsed. This, however, was replaced with little difficulty by opening the eye suddenly two or three times before the window, the contraction of the pupil drawing the iris out of the wound. The progress of the case was perfectly satisfactory, and the patient was enabled to see as well on the eighth day as after the most successful operations of extraction.

The substance removed consisted of the amber-coloured nucleus enveloped in capsule, which had shrunk and rolled up, and had a considerable rent on the anterior surface; the adhesion was semi-opaque, rather gelatinous in appearance, but very tough.

I have also found these canula forceps of essential service in the removal of foreign bodies from the interior of the eye; a small corneal incision suffices, and the peculiar mode in which the blades open enables them to act in a far smaller space and with less violence to the eye than can possibly be the case with ordinary forceps. The first specimens shown to me were far too long in the tube to be easily manageable, and at my request Monsieur Lüer made a shorter pair, which answer admirably; the instrument, however, requires to be taken to pieces and carefully wiped after being used, for if this be neglected, and the least moisture remains on the steel rod, it rusts in the canula, and the delicate apparatus is at once disarranged. I offer this caution from experience. A good way to protect eye-instruments and other delicate knives from rust is, after wiping, to draw them through leather smeared with tallow or suet. This thoroughly protects them from damp, never clogs, is always at hand, and can be wiped off with perfect facility.

19, Berkeley-square.

OBSTRUCTION OF THE PULMONARY ARTERIES

A CAUSE OF SUDDEN DEATH AFTER LABOUR.

By JOHN HAVERS, Esq., F.R.C.S.

In some additional observations on obstructions of the pulmonary arteries, read before the Royal Medical and Chirurgical Society, Mr. Paget remarks of a fresh case there related, that "it presents the disease in a new and important form, making its progress unattended by alarming signs and almost unobserved, and then destroying life with terrible abruptness."

The case which I have now to relate goes to show, that this disease may make its progress entirely unobserved and unsuspected; and it is the more interesting, because it tends in a certain degree to clear up the doubt which has surrounded the actual cause of death occurring after shocks to the system, and especially after labour, where no absolute disease of the great organs can be detected.

Mrs. W. C., aged 34, a pale, delicate lady, of strumous habit, was confined with her second child on the 18th of August last. Her labour was easy and natural. In the removal of the placenta, however, some little difficulty occurred, and its expulsion (effected by gentle traction) was accompanied by a sudden and violent gush of blood; so violent, indeed, as to place her life in imminent danger. The hæmorrhage continued only a few seconds, and the patient, pale and anxious, gradually recovered. I remained by her bedside for many hours, but no further discharge of any moment took place. She progressed satisfactorily, having a little trouble with her milk, till the morning of the 23rd, when I found her restless, her countenance sallow, her eye unusually bright and wandering, her manner catching and irritable; she said she had passed a bad night, which she referred to the fulness of her breasts producing a feeling of palpitation and distress at the pit of the stomach. Her tongue was slightly coated; her pulse, as usual, weak and quick. An alterative dose, followed by aperients, with attention to the breasts, relieved these symptoms, and on the 25th she was convalescent. Nothing occurred to retard her recovery up to the morning of the 30th. She had been on the sofa and easy chair each day, was in good spirits, and apparently in good health. On that day she was better than usual; she made her lunch at an early hour, and told her nurse she was so well that she would dress herself without assistance; while in the act of dressing she fell on the bed; the nurse observed some frothing at the mouth and slight convulsion of the face. She spoke feebly once, then laid herself back and died, the whole circumstances occupying but a few seconds.

My friend Mr. Paget was kind enough to be present at the *post-mortem* examination, which took place forty-four hours after death. The body was exceedingly pale: with the exception of the cicatrix of an old abscess in the apex of the right lung, and the heart, to be hereafter referred to, the organs were generally healthy.

The muscular structure of the heart was pale and thin, especially that of the right ventricle, which contained some dark blood; each of the pulmonary arteries contained a clot of blood, nearly filling the calibre of the vessels. These chief clots were about an inch and a quarter in length, mottled and firm, and in some instances slightly adherent to the sides of the vessel. In tracing the divisions of the artery, numerous other clots were found of the same character as the larger ones, and extended even into the smaller ramifications of the arteries. Mr. Paget seems to think, that these clots had been probably two days in existence, previous to the death of the patient.

In the paper by Mr. Paget, before referred to, it is I think sufficiently explained why these obstructions are to be found in the pulmonary vessels rather than in those of the systemic circulation; and if the circumstances necessary to the development of this disease are, as I believe them to be, 1st, a feeble state of the heart itself; 2ndly, such a condition of the blood discs as renders them more than usually liable to collect in masses; and, 3rdly, a shock to the system from whatever cause produced, then it would follow, that, although all are liable to such attacks, pregnant or puerperal women are, *cæteris paribus*, more disposed than others to such seizures, because we know that their blood globules have, from their very condition (and obviously for a wise purpose,) a greater tendency to aggregation.

I purposely abstain from any further remarks on this case, saving to express my conviction, that such obstructions of the pulmonary circulation are a frequent cause of sudden death after labour, and I shall very shortly beg your permission to refer to other cases which have come to my knowledge, and which bear upon the same subject.

Bedford-place.

CASE OF AMPUTATION OF THE THIGH,

WITH AN ENGRAVING OF AN APPARATUS FOR PREVENTING THE PROTRUSION OF THE BONE.

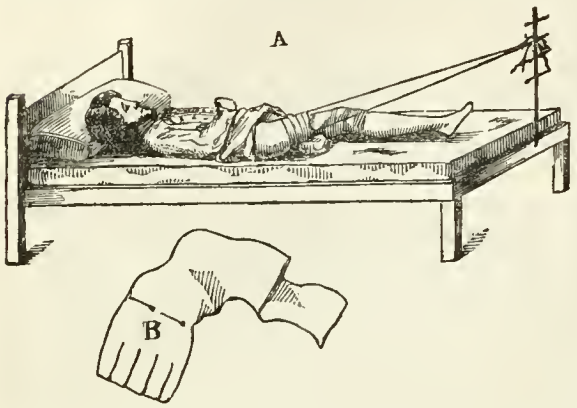
By JOSEPH HINTON, Esq., M.R.C.S.L.,
Surgeon to the Blaina Iron Works.

During my dressership at one of the Metropolitan hospitals, I was occasionally struck with the inaptitude of the usual methods of dressing stumps, especially above the knee, inasmuch as they encourage the protrusion of the bone, either between the flaps, or by ulceration through one of them, generally the superior. One case is vividly impressed upon my recollection, occurring in the grand-daughter of Mr. Hyatt, the West Indian. She was a weakly, strumous girl, and came into the hospital, under Mr. Bransby Cooper's care, for the express purpose of undergoing amputation of the thigh. This was performed, and the patient progressed most satisfactorily for the first fortnight; the flaps were uniting kindly, when a faint blush appeared upon the surface of the anterior flap, plainly caused by the pressure of the bone beneath; indeed, in a few days, it was painfully evident that the femur most protrude shortly, unless some plan were devised to prevent it; the sharp edge of the femur appeared scarcely separated from the finger by the thin portion of tensely drawn and shining integument which covered it. In this case, the apparatus succeeded admirably, and having lately had occasion to use it in a somewhat similar case, with equally satisfactory result, I am induced to lay the subject before the Profession in your pages, if you consider it worthy of such a position. Whether it really contains only the air of novelty without the substance, I am ignorant, but when first applied by me in the wards of Guy's, none remarked that it was a well-known application.

The casual observer cannot fail to notice, that in the ordinary method of dressing amputations of the thigh by three or four broad strips of adhesive plaster, the external strips retract the sides of the flap, leaving the femur pressing against their centre, especially if the flaps are rather short; nor does the middle strip of plaster improve this in any material degree, for it merely subjects the intermediate soft structures to pressure from the strapping in front and the femur posteriorly, this pressure often encouraging a tendency to sloughing. To obviate this, the only plausible plan appears to be the drawing forwards the whole of both flaps, and applying only mediate pressure—if I may be allowed such a term—to the wound itself. It will be seen that the apparatus fully answers this object.

The subject of the second case need not occupy our attention long; suffice it to say, that the poor fellow by some accident fell upon the circular saws in the forge, and in less time than it takes me to write it, his right thigh and left forearm were nearly severed from the body. The bane had in some measure carried its own antidote, for the saws, being heated from the contact of the red-hot rails, plugged the vessels sufficiently to prevent any amount of hæmorrhage. I was forced to re-amputate the thigh, as also partly the forearm, and though secondary hæmorrhage came on, the patient progressed favourably. Reparative action, however, was very slow in the lower extremity, and after a fortnight or three weeks, during the dressing of the stump, I noticed something white between the flaps, which proved to be the end of the femur. To obviate the protrusion, which appeared inevitable, I employed the following apparatus:—The woodwork at the foot of the bed was bored sufficiently to admit firmly an upright pole about a yard in height, and rather more than an inch in diameter; the pole itself was transfixed at various heights by small pieces of wood, three or four inches in length. (See *A*, *Engraving*.) I then took two pieces of plaster, about six inches in length by four or five in breadth, varying according to the size of the limb. (See *B*.) One end of this is cut into four or five slips, the other being fastened by a couple of pins to a yard and a half of bandage. The slit ends of the pieces of plaster were then

made to encircle the limb, one being applied to either flap, and in order to fasten this securely, a broad piece of plaster was subsequently placed round the stump, and over this a few turns of a roller. The whole was then drawn forward and fixed to the pole at the foot of the bed, as seen by the engraving.



This traction cannot fail to draw the edges of the stump into perfect apposition, at the same time all pressure is removed. It is simple and inexpensive, and can be applied by the surgeon himself in the poorest hovel. Occasionally it will be found advantageous to cross the bandages, tying the lower to the upper part of the pole, and *vice versâ*, or the surgeon may alter it in different parts to suit any case; or, in order to bring any portion of the flaps into closer apposition, a small opening may be made in each piece of plaster, and a strip passed through it. It has also this advantage,—that the warm-water dressings may be applied by the nurse without moving the stump from its pillow. In both these cases the result has been perfectly satisfactory, and the object of preventing protrusion completely attained.

CASE OF DISLOCATION,

WITH FRACTURE OF THE SHOULDER-JOINT.

By W. HEWETT, Esq., M.R C.S.,
House-Surgeon to the Bradford Infirmary, Yorkshire.

Injuries of the shoulder-joint are generally so important, and often so obscure, that interesting cases of this kind should be always put upon record.

Hannah Metcalf, aged 16, a healthy little factory-girl, was admitted as an in-patient of this Infirmary on the 30th of August, suffering from a very severe injury to the right arm and shoulder, produced by her getting entangled in some machinery.

When I first saw her, which was shortly after the occurrence, the nature of the accident was sufficiently obvious; but, after the lapse of a few hours, when the part became immensely swollen, and very painful, I believe no one could have ascertained clearly the exact nature of the case.

The humerus was fractured at its surgical neck, the shaft being dragged upwards, backwards, and inwards, so that its ragged extremity could be felt deeply imbedded in the muscles forming the posterior wall of the axilla.

The forearm was pronated, and there was considerable shortening of the limb, which was twisted completely backwards behind the trunk.

The head of the humerus, which was luxated, could be plainly felt loose in the axilla; it was freely moveable there, and could readily be restored, although it immediately became again displaced on the support being withdrawn.

The acromion, of course, was unusually prominent, the whole shoulder flattened, and the fingers could be readily pushed into the hollow of the glenoid cavity beneath.

Liston says, this injury must, from the very nature of things, be most rare: and Cooper states, that the complication of fracture with dislocation happens but seldom, and it cannot occur unless the luxation has taken place first, or has been produced at the same time, and by the same cause. But, in this case, the luxation was probably due to muscular action, and therefore *consecutive*,—the subscapularis, by its spasmodic contraction, having dragged the head of the humerus from the glenoid cavity. Believing, then, with S. Cooper, that this is "fortunately a very uncommon accident," I cannot altogether agree with him in his other observations as to the cause of the dislocation in all cases.

The head of the humerus was readily replaced, and kept *in situ* by an axillary pad, secured by a handkerchief passed over the opposite shoulder. The limb being extended, the lower fragment was retained in position by four wooden splints in the usual manner. Cold evaporating lotions and leeches were applied to the shoulder, which was exceedingly painful; the constitutional disturbance was, however, very trifling throughout. The elbow was first bent at a right angle, and supported in a sling; but, owing to this plan seriously impeding the circulation from the pressure in the axilla, it was speedily abandoned, and the limb merely laid upon a pillow in the extended position.

The girl was ordered to keep in bed, and the limb was not disturbed for a fortnight; the fracture had already become pretty firm, and passive motion was begun.

The case continued to progress most favourably, so that the axillary pad and the splints were removed altogether just a month after the occurrence of the accident. The patient, at present, is not well able to raise her arm to its full extent, but she has free motion of the limb in every other direction, and is able to resume her work in the mill.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Feb. 14.—Medical Society of London. *Subject:*—Mr. Wagstaff, "On Topical Medication in the Treatment of the Pharyngo-Laryngeal Membrane." Eight o'Clock.

—— —— Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Monday, February 16.—Chemical Society. Eight o'Clock.

—— —— Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.

—— —— Statistical Society of London. Eight o'Clock.

Tuesday, February 17.—Pathological Society of London. *Meeting of Council.* Seven o'Clock.

—— —— Royal Institution. *Subject:* — Professor T. Wharton Jones, "On Animal Physiology." Three o'Clock.

Wednesday, February 18.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.

Thursday, February 19.—Harveian Society. Eight o'Clock.

—— —— Royal Institution. *Subject:*—Rev. J. Barlow, M.A., Sec. R.I., "On the Physical Principles of the Steam-Engine." Three o'Clock.

Friday, February 20.—Royal Institution. *Subject:*—F. C. Penrose, Esq., "On Some Relations of Science to Architecture, considered as a Fine Art." Half-past Eight o'Clock.

—— —— Western Medical and Surgical Society of London. *Subject:*—Dr. Cahill, "On a Case of Disease of the Brain of Long Standing Terminating Fatally; with an Account of the Appearances Observed after Death." Eight o'Clock.

Saturday, February 21.—Medical Society of London. *Subject:*—H. Haynes Walton, Esq., "On Nævi and their Treatment." Eight o'Clock.

—— —— Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

University of Durham.—At a recent convocation at this University, the articles of foundation of the Newcastle-upon-Tyne College of Medicine were read and approved by the House, and a grace was passed, signifying approbation, by setting the University seal to the articles. A further grace was passed, in agreement with a provision of the said articles, for giving to the above-mentioned college of medicine the name of "The Newcastle-upon-Tyne College of Medicine," in connexion with the University of Durham. This, we believe, is the first instance in which the Medical Profession has been brought into working co-operation with this ancient University, which has been hitherto restricted to theological purposes, and the granting degrees in theology and *belles lettres*.

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Medical Times & Gazette.

SATURDAY, FEBRUARY 14.

"SCIENTIFIC MEMBERS FOR PARLIAMENT."

Under the above title, a very able letter, signed "A Physician," was published in the *Daily News* of last Monday. The writer remarks, that "knowledge, wealth, and numbers" should be alike represented in Parliament; the term "knowledge" being used, not to imply merely the common sense, and the usual intellectual training of the nation, but special devotion to objects of science. It was the acknowledgment of the principle, that knowledge, apart from numbers and wealth, should be considered in the formation of our representative system, which induced James the First to enfranchise Oxford and Cambridge; and thus, for more than two centuries, our great Universities have returned Members to Parliament, simply on the ground that they are, or have been, the principal seats of learning in the empire.

Working out this remark with great vigour, the writer urges that the principle should be extended, and that the great scientific and educational bodies in the kingdom should have granted to them, by the New Reform Bill, the same privileges as are enjoyed by the Universities of Oxford and Cambridge, in virtue of the same endowments.

The University of London, it is observed, with its affiliated teachers and schools, and with its numerous graduates, would thus form one great body, composed of many of the most intellectual men in the kingdom, who might advantageously return two Members to Parliament. So also the Royal Society, and other analogous bodies; and the Medical Profession might also return a certain number of Members. Altogether, it is calculated that the various scientific bodies, and the Medical Profession in England, Scotland, and Ireland, might send twenty-seven Members to Parliament, who would represent one section of the great scientific republic.

We consider this suggestion a most admirable one—the great difficulty at the present time is to extend the franchise, and yet provide some counterpoise to an ill-regulated democratic element. The nominees of our scientific societies, and of our learned professions, would be men of liberal and yet of cautious minds. Anxious to advance, yet careful in the manner of advancement, they would constitute a phalanx of thinkers, whose opinions would be respected alike by Parliament and the country. No body could be conceived more calculated to counterbalance and to restrain that flood of democracy, which, it must be evident to all, is ready to be lashed into a tempest, even if its deep waters at present lie silent and unmoved. In admitting the nominees of scientific bodies to Parliament, we not only recognise the principle, that knowledge is the real test by which the Senate of the nation should be chosen, but we actually meet a present emergency, and provide against a contingent evil.

Leaving, however, the general merits of the case, we would make a special application of it, by recommending this suggestion of "A Physician" to the Graduates Committee of the University of London. For some time, this Committee have carried on a fruitless, and, we are disposed to think, a useless agitation. Not that we question the abstract justice of their claims; but we have been by no means impressed with the manner they have urged them. Now, however, they have a fair subject for agitation; and, with a little management, they may co-operate with the Senate of the University in urging this matter on the Government. Let them take, as the basis of their scheme, the right of the University to the franchise, and the right to vote of every member of the Senate, of every graduate, and of every teacher at a recognised school. They will thus really earn the gratitude of their constituents, while they are accomplishing one section of a great plan.

We are happy to find that "A Physician" so boldly advocates the right of the Medical Profession to the franchise. Let the great Inns of Court have the same right, and let the solicitors also be incorporated, and return Members. We should be glad to see a union of the two Professions on this point, and we have little doubt that some concessions would soon be made to their demand.

WATER SUPPLY FOR THE METROPOLIS.

Our readers are aware that Lord Seymour has already brought a Bill into Parliament for the supply of the Metropolis with water. The present measure abandons completely the ground occupied by the Government measure of last session. Instead of a consolidation of Companies, the old monopolies will continue to act, and, if necessary, fresh private companies will be formed. The Government, however, reserves to itself a controlling power, both as to the source of supply and as to the rateage of poor districts.

The Board of Health are thus thrown over; and the scheme for creating a municipality of rate-payers, which was broached last year, but which had no *locus standi* before the Parliamentary Committee, is definitively dismissed.

As regards the source of supply, Lord Seymour intimates that the Thames, within the tidal flow, will no longer be permitted; and the three or four Companies who still continue to take their water from this source, will be compelled to carry their pipes higher up. The New River Company will be compelled to cleanse their conduits and reservoirs, and filtration will be strictly enforced.

As we have not yet seen the Bill, we are unable to offer

any decided opinion upon it; but we are disposed to think that Lord Seymour's measure will meet the more important points in the case, and that it is the most practical plan which has yet been proposed. The Government reserves to itself the power of inspection and control; and this great point being carried, the Companies will, for their own sakes, doubtless improve their administration in every way.

We did not observe in Lord Seymour's speech any allusion to the propriety of diverting from the Thames the sewage of the towns seated between London and its source. This should, however, be done; as many of these towns are growing rapidly, and the quantity of sewage is seriously augmenting. But when we have perused the Bill itself we shall be in a better position to discuss the case.

GREENWICH ELECTION.
NAVAL ASSISTANT-SURGEONS.

This contest has terminated in the return, by a large majority, of Rear-Admiral Houston Stewart, one of the most liberal-minded members of the Admiralty Board. We congratulate the Naval Medical Service on the success attending our suggestion to the medical and non-medical electors of the borough of Greenwich, to return only that candidate who would support their cause by the additional influence which a seat in the House of Commons affords. Dr. Purvis, of Greenwich, attended the meeting of Admiral Stewart's friends at the Greenwich Lecture Hall, on Saturday last, and ably interrogated the Admiralty candidate. In spite of the opposition from interested parties, and from men unable to understand the object of the questions, he succeeded in extracting a promise from Admiral Stewart, that the Admiralty Order of July, 1850, should be carried out in strict integrity, and without any evasion whatever on the part of the Executive. The successful candidate referred Dr. Purvis to the Librarian of the College of Surgeons, with whom he had for some time been in communication, and who could satisfy the Doctor as to his sincerity on the subject. We remind the Assistant-Surgeons, that they must continue to exert themselves in their own cause; unless they do so, neither the sympathies of their friends, nor the able pens and ready advice of independent members of their own Service, will lead to success.

PROPOSED MEDICO-ETHICAL ASSOCIATION.

It is impossible to conceive men of the same Profession to combine together for a worthier purpose than to follow the example of the Manchester men, and establish an *Ethical Association*. It has been and ever will be vain to look for any enactment by our Medical Colleges, which can answer so praiseworthy a purpose. Such institutions seem chiefly constituted for advancing the mundane purposes of their rulers. An Ethical Association must be formed from members of all our corporate bodies; and there is scarcely an individual who will not willingly come forward, because it is the interest of each to be protected against unjust conduct; and who is there among us who has not had occasion bitterly to feel, at some period of his professional life, the unjust conduct of one or other of his brethren? Daily experience furnishes instances of this kind. But the practice would, if it were not put an end to, at least suffer a severe check, if an aggrieved member of an *Ethical Association* could lay his case before a competent tribunal.

By the law of the land, a practitioner may prosecute any one who defames his professional character; but, putting aside the horrors of the law, there are numerous complaints which might with great propriety be made, but for which no legal redress could be obtained.

The Medical Profession might take the Army and Navy as examples, — "Courts-martial" exercising a wholesome control over the moral conduct as well as the discipline of the army.

THE "EDINBURGH MONTHLY JOURNAL."

The assertion contained in the last Number of the *Edinburgh Monthly Journal*, that Professor Syme's letter had not been inserted in our columns, and the inference drawn from it, are simply untrue. From the editors we expect the contradiction. Our readers are aware that Mr. Syme's letter appeared in our Journal of the 31st ult.

We have already wasted far too much space upon Mr. Syme, whose letters to us must take their turn with those of other correspondents; and that more especially since we have abundantly shown, that Mr. Syme has no more right to call himself the originator of the perinæal section, than he has to claim the merit of his (so-called) lip-operation.

REVIEWS.

Die Bright'sche Nierenkrankheit und deren Behandlung: eine Monographie. Von Dr. Fried. Theod. Frerichs, ordentlich Professor der Medecin, und Vorstand der medicinischen Klinik in Kiel. Braunchweig. 1851.

Bright's Kidney Disease and its Treatment: A Monograph. By Dr. F. T. Frerichs, &c., &c.

"Bright's Disease and its Treatment" are still among the *vexatæ questiones* of pathology and therapeutics, and as Dr. Frerichs is so well known and highly esteemed in this country on account of his physiological inquiries, we feel assured that an analysis of his pathological researches will be more welcome than any lengthened critique upon their results.

It is not easy to condense into smaller compass a work so crowded with facts as that before us; but, limiting ourselves to the observations and opinions of its author, and placing in the most prominent position those which have the greatest share of novelty, the probability of his receiving justice at our hands will be greater than if the attempt were made to weigh the merits of his treatise with those of others who have preceded him.

The first chapter contains an "historical retrospect," into which it is not necessary to enter, as the facts are more or less familiar to every student of pathology. It is interesting to observe the early date at which groups of symptoms were recognized as bearing more than an accidental relationship to each other, and it is still more so to perceive that the links connecting them were discovered only when inquiry proceeded upon the truly inductive method,—for we are conscious that there is in it the germ of a power which will eventually be great enough to grasp facts apparently more widely separated, and penetrating enough to perceive their bonds of union.

The anatomical changes in the kidney are divided into three forms, which may also be considered as stages of the process of disease. They are the following:—

I. The stage of hyperhæmia, and of commencing exudation.

II. The stage of exudation, and of its commencing transformation.

III. The stage of degeneration—atrophy.

In the first of these, which is frequently attended by hæmorrhagic effusion from the glomeruli, from the capillary plexus surrounding the urinary tubuli, or from the veins upon the surface of the cortex, the epithelium of the tubuli is not essentially changed, although the canals themselves, especially those of the cortical substance, are commonly filled with coagulated fibrin. These coagula are sometimes perfectly simple, and present themselves in this condition as casts of the tubes in which they were formed, while at other times parts of the epithelial lining, or more or less changed blood-corpuscles, may be found imbedded in them. This condition is not often met with anatomically (20 times in 292 *post-mortem* examinations), and is then the accompaniment of an acute, violent illness. The disease when chronic is rarely fatal at so early a period.

In the second stage the process of exudation increases, while

the hyperhæmic condition becomes less marked. Metamorphosis of the exuded matter follows; the epithelium and the fibrinous casts of the tubuli break up into fatty molecules. In the Malpighian corpuscles similar exudation and fatty matter are seen lying between the capsule and its contained glomerulus, and then these bodies are raised above their natural size; but as long as the stream of secretion, poured from the glomeruli, is sufficiently powerful to remove the coagula of fibrin, this increase of dimension is not observed. In the urinary canals, especially those of the cortical substance, important changes are in progress; the epithelium undergoes complete transformation, losing gradually the form of its cells, presenting fatty infiltration to a variable extent, and ultimately losing its characteristic appearance and function, and becoming replaced by granular detritus and fat. This second stage was found in 139 in 292 examinations. It embraces the 1st and 2nd forms of Bright; the 2nd, 3rd, and 4th of Rayer and Rokitansky; the 2nd, 3rd, 4th, and 7th of Christison; and the 2nd and 3rd of Martin Solon.

In consequence of the degeneration of fibrin in the urinary tubuli and the Malpighian corpuscles, and the removal of this with the more or less transformed epithelium, the walls of these structures collapse, and part of the kidney is atrophied. It is this which constitutes the third stage of Bright's disease. This atrophy is brought about in some cases by the contraction of plastic matter, when the latter has been exuded into the interstitial textures. This is rare, however, and when present is only a co-operative cause of atrophy. This 3rd stage of Frerichs corresponds with the 3rd of Bright, the 5th and 6th of Rayer, the 5th and 7th of Rokitansky, and the 4th of M. Solon.

Among the not constant anatomical changes of the kidney, Frerichs enumerates and describes—1. Apoplexy; 2. Suppuration; 3. Cystic formations; 4. Calculous deposits; 5. Tubercle, etc. In the paragraphs upon the chemical changes in the kidney, the amount of solid constituents is given, and the proportion of fat in a hundred parts of dried kidney substance. In health the latter varies from 4·4 to 5·05 per cent. In morbus Brightii it was found varying from 4·40 to 13·9. Generally speaking, the quantity of fat was greater when the disease had advanced to the third stage, but this is not invariable; and the fact, that by chemical examination the quantity is often found to be much less than microscopic observation would lead us to expect, must, according to Frerichs, be considered as a proof that we are not justified in naming as fat all those globules which resemble it in form. In the kidney of a cat, and in that of a dog, the fat was found by Frerichs to vary from 27·20 to 32·50 per cent. Both animals were perfectly healthy; their urine contained not a trace of albumen, a sufficient proof that morbus Brightii cannot be considered dependent solely upon fatty degeneration.

A statistical report, and tabular representation of the changes found (*post-mortem*) in other organs, concludes the second chapter of the book. The cases are gathered from Bright, Christison, Gregory, Martin Solon, Beequerel, Rayer, Bright and Barlow, Malmesten, and the author's own observation.

The third chapter presents a short account of the general course of the disease in its two forms, acute and chronic; and we pass from it to the fourth, entitled "Special Symptomatology." In this the appearances (merely sketched before) are described in detail,—their frequency given numerically,—their causation examined,—and their clinical value, in respect of diagnosis, prognosis, and treatment, pointed out.

The symptoms are treated under the following heads:—1. Those of disordered uro-poësis,—embracing, (a) pain in the region of the kidney; (b) percussion and palpation; (c) frequency of micturition; (d) changes of the urine. 2. Those of changed blood. 3. The habitus of the patient. 4. Dropsy. 5. Changes in the action of the skin. 6. Uræmic intoxication, (chronic and acute). 7. Disturbances in the functions of the primæ viæ. 8. Pseudo-rheumatic pains.

It would be impossible to present anything but the most unsatisfactory analysis of this chapter, if we attempted to embrace all its contents. We shall limit ourselves to those included under the 6th and 7th heads; and we shall do so simply because the statements there made have more of novelty than the others.

1. *The Chronic Form of Uræmia.*—This steals slowly and unobservedly upon its victim, and is in almost every instance fatal. In the early stages of Bright's disease, there is a peculiar dulness, or sleepiness, in the expression of the face, and in the demeanour of the patient. He complains of dull headache,—a "light" feeling,—the eyes are expressionless,—the whole physiognomy is depressed in its features,—he is forgetful, and listless. These symptoms diminish if the secretion of urine becomes more abundant, and sometimes they disappear entirely for a time. In other cases they gradually increase in intensity; the sleepiness passes into stupefaction; the patients, who at first can be roused by speaking to them loudly, or by other means, and will then give rational replies, now sink into ever-deepening lethargy; it is impossible any longer to arouse them; respiration becomes stertorous, and is replaced only by the gurgling of death. They generally lie perfectly still, without speaking. Delirium is rare; when it does occur, it is of the low muttering description; the patients repeat, times without number, a few words or sentences. Death is often preceded by convulsions; trembling of the hands; distortion of the features, becoming quickly followed by clonic spasm, extending over the whole system of voluntary muscles. This is the more common form of nervous disturbance in Bright's disease. It may last for a longer or shorter time, and is often capricious in its course. Nevertheless, it is more to be dreaded than any other complication, for it is the most certain herald of a fatal termination. Differing from it in its manner of appearance, and very essentially different in respect of prognosis, is the

2. *Acute form of Uræmia*, which commences suddenly, and in a short time reaches its full intensity. It appears to attack the patient in one of three ways, the first symptoms being either those of depressed cerebral function, of irritation of the spinal cord, or of a combination of the two. Frerichs confirms, from his own experience, the statement of Dr. Addison, that when (under depressed cerebral function) the respiration becomes stertorous, there is not the deep guttural tone heard in hæmorrhagic apoplexy, from the movements of the velum palati, but that the sound is of higher pitch, and is caused by the passage of air against the hard palate and the lips. He also adds his testimony to that of Dr. Bright with regard to the persistence of consciousness in some cases where uræmia has evidenced itself first by convulsion. Although the prognosis is more favourable when the attack has this acute character, inasmuch as it generally follows a sudden suppression of the urinary secretion, yet it may prove fatal in a few days, or even hours; and the result must be anticipated as very unfavourable when acute uræmic intoxication occurs, as it does not unfrequently, during the course of chronic Bright's disease. A sudden change in the quantity or quality of the urine, disturbances of the organs of sense, etc., are insisted on as of importance in the light of warning symptoms. There are cases, however, where these are entirely wanting, and the diagnosis may be attended with great difficulty. A very constant, and, in the earlier periods of uræmia, a prominent symptom, is vomiting. Altered ingesta are thrown up at first, but subsequently a thin, watery substance only. Its re-action, seldom acid, is generally neutral or alkaline; it emits frequently a sharply ammoniacal odour; and, if a glass rod dipped in hydrochloric acid is brought near it, copious white fumes are developed. If the inodorous, neutral, or even slightly acid fluid is heated with liquor potassæ, the presence of an ammoniacal compound is demonstrated. Frerichs has frequently sought for undecomposed urea in the vomited matters, but always without success. Artificial uræmia, induced in animals by extirpating the kidneys and injecting urea, is attended by the vomiting of similar matters containing a large quantity of carbonate of ammonia, but no undecomposed urea. The decomposition of urea into carbonate of ammonia does not (according to Frerichs) take place in the stomach through the action of the gastric fluid, (as Bernard and Barresewil maintain,) but it is brought about in the blood within the vessels.

This form of vomiting must not be confounded with others, which are very common in the course of morbus Brightii, and which have their origin in chronic catarrh of the stomach, simple perforating ulcer, the misuse of spirits, etc. etc. The characters described serve to distinguish them from that of true uræmic character.

Serious disturbances of the nervous system appear to be in many cases delayed or altogether avoided by this vicarious excretive process. This has, however, been too confidently asserted to be a general rule by Bernard and Barresewil. In the stomachs of animals whose kidneys have been removed, ammoniacal compounds are constantly found; but the uræmic condition is not thus delayed in the majority of instances. It gives evidences of its presence at the time that the described change takes place in the secretion of the stomach. Ammoniacal salts are then found in nearly all the secretions, and compounds of that base may be discovered in the expired air. The relation of diarrhœa to uræmia requires further elucidation, and Frerichs does not give his opinion upon the subject.

The conditions of the perspiration and of the expired air are then closely examined. The former has been tested principally by the noses of pathologists, and is left doubtful; in the latter, the pre-

sence of ammonia is established; and in artificial uræmia, it was not until this base could be detected that any signs of disturbance in the nervous system were observed. Pathological anatomy is then shown to throw no certain and no constant light upon the nature of uræmic intoxication; and it is believed, that in the condition of the blood the key to the mystery is to be found. Its physical properties, in respect of consistence, colour, odour, etc., present no unvarying change of character. Its chemical relations are altered, and the alterations are essential. In all cases where the symptoms of uræmia presented themselves, carbonate of ammonia, and, in addition, undecomposed urea, were found in the blood. The quantity of the former is variable to a high degree; but in no one instance did it remain undetected. Frerichs gives another historical sketch of the theories of this branch of his subject. For a long time the opinion has been almost universally held, that the cause of these symptoms was to be found in the retention of some urinary elements in the blood. Osborne and G. Owen Rees form the exceptions; the former being of opinion that arachnitis was the cause, to which pathological anatomy returns the most satisfactory answer; and the latter, questioning the influence of urea in the production of coma, etc., from the perfectly correct observation, that the appearance and intensity of such symptoms in morbus Brightii, hold no constant relation to the quantity of the urinary secretion; and further, that the blood may be surcharged with urea, and yet cause no symptom of uræmic poisoning. Rees considered hydræmia as the essential condition; but this cannot be so important as he would make it appear, since coma, convulsions, etc., occur in acute morbus Brightii, during either the earlier or later stages of scarlet fever, typhus, etc., without there being any evidences of such thinning of the blood. The question remains to be answered, in what way suppression of urine exerts the influence assigned to it, and which of its elements is the active agent? By the experiments of Vauquelin, Sigalas, Bichat, Courtin, and Gaspard, repeated with additions of his own, Frerichs proves, that the presence in the blood of a large quantity of urea, of uric acid, or of urine itself, with extractives and salts, cannot cause the symptoms commonly observed when suppression of the secretion takes place. The result of a course of inquiry undertaken by Frerichs in 1849 and 1850, is that for the production of uræmic intoxication, the presence of any or all of these substances is insufficient, but that the urea must be decomposed through the agency of a peculiar ferment substance, and carbonate of ammonia set free within the blood-vessels. The production of this decomposing agent in febrile affections is not difficult to suppose, and the rapidity with which symptoms of uræmia are developed when morbus Brightii supervenes upon scarlet-fever, typhus, etc., together with the suddenness of their appearance in a person whose blood has been for a long time overladen with urea (without them) lend support to the view. The injection of carbonate of ammonia into the blood induces all the symptoms of uræmia, and without defining the precise nature of the ferment body, but asserting that a very slight modification of one of the normal elements of the blood would be sufficient for the purpose, Frerichs, by a course of experiments, considers that he has established his theory with regard to uræmia.

It would be impossible, within the limits of this review, to follow our author closely through the minutiæ of the concluding chapters. We can but indicate the topics which form their basis, so that our readers may form some estimate of the book.

In the chapter upon the *complications* of morbus Brightii, the several diseases of the heart, arteries, veins, liver, and spleen, &c. &c., are examined and described. The *frequency* of Bright's disease; its *duration*, *course*, and *termination*, are then considered; and separate chapters are devoted to the questions of etiology and pathogenesis, essence of the disease, diagnosis, prognosis, varieties (forms), and therapeia. An Appendix, containing clinical reports of sixteen cases, and the results of a series of experimental researches, concludes the volume.

Frerichs describes the following forms: —1. Simple. 2. Cachectic. 3. That of the drunkard. 4. That occurring in acute blood-disease, (cholera, scarlet fever, measles, typhus, &c.) 5. That accompanying pregnancy.

In the chapter upon treatment, the disease locally and generally, its more constant and its occasional complications, are severally dwelt upon. The author does not commit himself to the system of depletion, of strengthening, of continually produced diuresis, purgation, or diaphuresis, but gives the moderate and judicious employment of all the various agents mentioned a position in his list, the peculiarities of the case under consideration leading to the choice of that which is most suitable.

In respect of the treatment when uræmic intoxication is present, Frerichs recommends acids, which should form innocuous compounds with ammonia in the blood, such as the vegetable acids,

The Descriptive and Surgical Anatomy of the Arteries, and Relative Anatomy of the Veins and Nerves of the Human Body. By JOSEPH HENRY CORBETT, M.D.; Graduate of the University of Edinburgh; Professor of Anatomy and Physiology to the Apothecaries' Hall of Ireland, etc. Pp. 355. Dublin: Fannin and Co. 1852.

We have looked through this work, and have found the description given of the course, relations, and distribution of the arteries very correct, and quite fit for the perusal of a student about to undergo an examination in practical anatomy. Considering, however, that at least an equally accurate account is contained in any good anatomical work, we are at a loss to know why Dr. Corbett should have presented to the Profession 355 pages, in some of which the matter is a little behind the day, in others only decently up to the mark, and comprising a whole in which not one spark of novelty can be found. A scientific monograph upon the vascular system might have gained Dr. Corbett repute; a good work upon the surgical anatomy of the large arteries would have been readable; but, in the present volume, we have the arid details of an anatomical subject, detached from all that could give it interest or completeness, followed by a few surgical remarks, too brief and incomplete to merit notice. We find no fault with the descriptions, although there are errors in type. Had Dr. Corbett copied the chapter on "the Arteries" from "Quain and Sharpey's Anatomy," the work would have been but little better.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM JOURNALS.

ALBUMINOUS URINE.

SOME new opinions on the significance of albumen in the urine have been lately advanced by M. Robin. M. Robin supposes that in the state of health the albumen is destroyed, or, to use the author's term, "burnt" in the blood, and the nitrogenous products of the process are urea and uric acid. Anything which can interrupt this combustion, produces the appearance in the urine of that albumen which should have been converted into urea and uric acid. The albumen then appears in the urine at the expense of these latter bodies. In pursuing this idea, M. Robin states, that in croup, in extreme ascites, in capillary bronchitis and emphysema, producing great dyspnœa; in phthisis, when there is great embarrassment of breathing, and especially when there is pneumonia; in cyanosis, and in heart diseases, producing a permanent degree of semi-asphyxia, albumen appears in the urine in consequence of the impediment to its combustion in the lungs.

In some other diseases the same fact is said to be observed; thus, in diseases of the nervous centres, producing lowering of temperature, and which arises from lessened pulmonary changes, albumen appears. In diabetes, and in those conditions of the nervous system in which there is a profound prostration; in cases in which the surface of the body is exposed to excessive cold, albumen also appears in the urine. In some pregnancies, when the lungs are compressed, the albumen also remains undestroyed, and consequently appears in the urine. In all these cases, there is one common antecedent, viz., incomplete action of the lungs, and one universal symptom, viz., albumen in the urine.

Bright's disease is supposed to be the consequence of any of these states when sufficiently long continued. M. Robin states that the urea is diminished in albuminous urine in the following cases; in phthisis, in diseases of the encephalon and cord, in general acute bronchitis, with great dyspnœa, and in Bright's disease.—*L'Union Méd.*

[These facts are stated without detail, so that it is impossible to know how trustworthy they are; but the matter has been referred to a committee, so we shall probably be better acquainted with the memoir shortly.—ED. *Med. Times and Gazette.*]

EASY DELIVERY.

The following extraordinary case is related by M. Guillot in a clinical lecture on pregnancy:—"Admiral Berard," says M. Guillot, "when stationed at Cape Horn, observed a remarkable fact. A woman was fishing on the border of the sea, with the water reaching to the waist. All at once she appeared in violent pain, and after some minutes she was observed to stoop and pick something out of the water. It was a dead child, which she took by the foot and pitched far out into the sea. Then she recommenced fishing. M. Berard, on the following days, saw her resume her fishing as if nothing had happened."—*L'Union Méd.*

THE TREATMENT OF TROPICAL DYSENTERY.

A very useful and practical paper on Dysentery appears in the *London Journal*, by Dr. Tait, formerly of the Madras Service. Dr. Tait takes the evacuations as the guides for his treatment, and, after describing the anatomical conditions coincident with the several varieties of evacuation, lays down the following rules:—When the discharges consist of viscid, tenacious, adherent, gelatinous, or mucous-looking masses, of varying colour, with intimately intermixed blood, the disease is in an early stage, and bloodletting, and mercury combined with opium, is the appropriate treatment. When the discharges are like the washings of raw meat, or are loose, glairy, but not tenacious, or watery, or offensive, with blood-streaks or coagula lying among, but separate from, the rest of the stool, a more advanced stage of the disease is present, in which mercury is not useful, but in which nitric acid, ipecacuanha, opium, and sometimes nitrate of silver, are the best remedies. When the stools are grumous and offensive, or of a chocolate colour, copious, and offensive, and in which case there is often extensive gangrene and softening of the intestine, medicines appear to be of little use, and no treatment which Dr. Tait has tried gave him satisfactory results. Mercury is especially hurtful. He recommends, however, on theoretical grounds, a trial of "yeast." During convalescence nitric acid is an excellent remedy. As injections, acetate of lead and opium are recommended. Dr. Tait has some very interesting remarks on the influence which the copious, frothy, fermented-looking stools which are present sometimes when there is abscess of the liver, have upon the healing of the colonic ulcerations.—*London Journal of Medicine.*

THE BLOOD OF THE SPLENIC VEIN.

A most able microscopical and chemical examination of the blood of the splenic vein has been made by Dr. Otto Funke. The original paper is a very long one, and we have selected only some portions of it. Funke, for various reasons, chose the blood of horses for his investigation.

Under the microscope, the splenic venous blood presented remarkable differences from the blood of the general venous system, as represented by the blood of the jugular vein, and from arterial blood. The red corpuscles did not form rouleaux, but in great numbers were aggregated in thick, irreguiar heaps, or in smaller numbers (6 to 12) forming little round or angular flakes, such as Ecker describes in the spleen-pulp. Pressure did not separate these heaps, but merely produced chasms at certain points. After some days, this firm cohesion of the corpuscles diminished. The size of the corpuscles varied extremely, but the majority were very small—smaller, indeed, than the corpuscles found elsewhere. The white corpuscles were excessively numerous; in one case they amounted in number to a quarter or a third part of the coloured particles; they collected also in heaps, and seemed to be united by a fine molecular matter. In some places they were mixed up with the red particles. In size they varied greatly, being sometimes as large as a red particle, at other times double the size. Some clearly contained a single nucleus. Although not absolutely certain of the fact, Funke believes that he traced the transition forms from one set of particles into the other.

Besides these cells there were constantly present "grannlar cells" (Körnchenzellen), so to call them, although Funke does not desire to imply that they are the same as the various cell forms often placed under this title. They were larger than the colourless corpuscles, and lay among them, aggregated or in heaps of two or three together. They were undoubted cells, and the cell-wall could be plainly seen; they were always spherical, transparent, with a defined border, and contained from four to ten small, dark, outlined, strongly refracting granules, grouped in various ways, either centrally heaped together, or forming a crescent, or without particular order, and frequently changing their mode of arrangement. Generally colourless, these cells were sometimes slightly yellow; they appeared to be identical with cells described by Ecker in the spleen-pulp.

Pigment cells, as described by Ecker and Kölliker, were never seen.

Once only, in many hundred examinations, could Funke find a blood-corpuscles-holding cell, although he examined more than a hundred drops of blood. As he could often find the cells in the spleen, he suggests two possible reasons for their rare appearance in the splenic venous blood, either they had become destroyed during the considerable space of time after death which elapsed before he examined the blood, or they are really absent in the blood issuing from the spleen. Funke does not attach much importance to the first suggestion, as, in the venous-splenic blood of a dog examined at once after death, he could find none of these cells. He is inclined to adopt the view, that the blood corpuscles are destroyed in the spleen. The single cell seen by him in the venous blood was tolerably large, oblong, transparent, with an evident granular nucleus, and in its centre were three unchanged blood corpuscles, similar to those external to the cell.

There were also in the splenic-venous blood of the horse some singular, or, as Funke terms them, "enigmatical bodies," about whose nature he seems very doubtful. These were round or oblong bodies, with defined outlines, slightly granular on the surface, of various sizes, sometimes as large as a starch granule, at other times almost filling the field of view; they lay in the spaces between the heaps of red corpuscles, or were sometimes enclosed round by these or by white corpuscles, like a ring. Whether they are cells or amorphous heaps, Funke does not know, but inclines to the former opinion. He found them not only in the horse, but in the fresh blood of the dog.

Besides these forms there were fibrinous flakes.

The addition of weak acetic acid produced the following changes. Some red corpuscles were entirely destroyed; others smaller and less deep coloured were not affected, as Gerlach has also noticed—the white corpuscles were made quite hyaline, but the outer wall was not destroyed for a long time; the nuclei were brought clearly into view, were spheres or elipses, eccentric, faintly spotted, and usually single, or less commonly double or treble. The granular cells were made hyaline, and dissolved slowly; the granules appeared at first to Funke to be unaffected, but more accurate observations taught him that they also dissolved; and, therefore, in spite of their remarkable resemblance, they were not fat. The peculiar round enigmatical bodies were unaffected by the acid.

The effect of water on the splenic venous blood was most remarkable. If a drop of blood is placed on the object-glass, and allowed somewhat to dry, and then if water is added, the following changes occur,—for some time the blood corpuscles diminish, become indented, then oblong and linear, and at last take the form of little rods, so to call them; these extend in length, and form at length prismatic needle-like crystals, crossing the field in all directions, and interlacing. This process is so rapid that it is difficult to observe that these crystals really form out of the blood corpuscles. ("Aus den Blutkörperchen selbst Entstehen.") These crystals were red coloured; their exact crystalline form could not be accurately determined; but they appeared, in some cases, certainly to be six-sided prisms, with dihedral apices. Besides these crystals, there was another form, consisting of rhombic tables, like cholesterine, and of various sizes. Many of the blood corpuscles remained unchanged.

The needle-form and prismatic crystals sometimes appeared, though in imperfect forms, by simple drying of the splenic blood, without the addition of any water. With respect to the chemical nature of these crystals, and to the effect of re-agents upon them, Funke has made innumerable experiments, but without being able to come to any positive results.

Dr. Funke proceeds, after some remarks on the increase of white corpuscles of the blood in some enlargements of the spleen ("Leukæmia,"—Virchow; "Leucocythæmia,"—Hughes Bennett), to the consideration of the chemical constitution of splenic blood; but this portion of the paper we must defer.—*Henle's Zeitschrift.* P. 172. 1851.

FOREIGN CORRESPONDENCE.

INDIA.

By JOHN BARCLAY SCRIVEN, Esq, M.R.C.S.,
Assistant-Surgeon, H.E.I.C.S.

INTERMITTENT FEVER.

Having lately arrived at the large military station of Meerut, where the number of sick within the last few months has been unusually great, I have had under my care several cases of intermittent fever of a very mild type, the details of some of which may possibly interest your readers.

Meerut is generally a remarkably healthy place, though lying low, and scarcely raised above the extensive plain in which it is situated; the soil is very dry, consisting of sand and clay.

The European lines are situated on a *maidan*, or grassy plain, now greatly parched from the continued drought, for we have had no rain since the end of August. The barracks are spacious and airy, about fifty yards apart, each accommodating one company of men. There are no trees in the immediate vicinity of the lines, but rather too many, perhaps, near the officers' bungalows round about.

The sewerage is good and well kept, but all the drains are open, and empty themselves into an open tank not a quarter of a mile distant. This, however, has been the case for years, and Meerut has not yet proved itself unhealthy. The now prevailing malady seems rather traceable to the bad quarters occupied by the troops in the Punjaub before coming here.

The three European regiments in the station are the 1st European Bengal Fusiliers, the 14th Light Dragoons, and the 29th Infantry, (Queen's.) Of these, the 29th have the largest number of men at present in hospital, but the 1st Europeans suffered most in the Punjaub, their losses from fever amounting to about 150 men. This corps occupied the citadel at Lahore, a close, unhealthy place, surrounded by a *hullah*, or bed of a river, dry except in the rains, into which ran all the drainage of the town. These men had the fever very severely, accompanied by bad head symptoms; while the 14th, at the distance of a mile or two, had it in a much milder form.

The disease, as we see it now, rarely resists treatment longer than two or three days; and the head symptoms are seldom serious.

It is full seven months since the regiment reached Meerut, and though the numbers of sick have greatly diminished, we get a good many relapses, favoured no doubt by the great changes of temperature to which men are subject during the hot days and cold nights of the autumnal season. Some of our patients have had frequent attacks ever since the first breaking out of the fever at Lahore. Others have had them only since their arrival at Meerut, and trace their origin to exposure on the march, while not a few of both classes have permanently enlarged and indurated spleens.

Case 1.—John Thompson, aged 25, six years in India, admitted Oct. 16, 1851. Has had fever several times. The present attack is quotidian, the paroxysms commencing at 7 a.m., and lasting till 8 p.m. The spleen is somewhat enlarged, and can be felt of a globular form below the cartilages of the ribs. On admission

℞ Pulv. jalap. co., ʒi.; infus. sennæ, ℥ij. M. ft. haust. statim sumend.

Oct. 17.—℞ Quinæ disulph., gr. iij.; acid. sulph. dilut. miss.; aquæ, ʒi. M ft. haust. ter die sumend.

19th.—No return of fever since the 17th, but to-day has had a slight attack of dysentery, several motions containing slime and blood. Omitt. mist. quinæ.

℞ Ol. ricini, ʒvj.; tinct. opii., ♏xv. statim sumend.

20th.—Is still purged, but has passed no blood since taking the oil. Habeat enema opii.; appl. cataplasm sinapis abdom.

℞. Mist cretæ co., ʒi.; tinct. catechu, ʒss.; tinct opii, ♏x. M. ft. haust. ter die sumend.; vesp. repet. enem. opii.

22nd.—Purging ceased; feels pretty well. Omit. mist. cretæ. repet. mist. quinæ.

23rd.—Quinine mixture seems to purge him, and is therefore omitted. Rep. mist. cretæ; enema anodyn.

24th.—No pain or purging since yesterday morning. Enlargement of spleen has disappeared. Omit. mist. cretæ.

℞ Infus. cinchonæ, ℥iss. ter die.

This patient was discharged well on the 27th.

Case 2.—Francis Murray, admitted Oct. 17; a tall thin man, aged 26; four years in India. Has had fever five or six times, always quotidian. Has been ill three days. Paroxysm commences about 11 a.m., and terminates about 4 p.m. Spleen is considerably enlarged, tender, and painful, extending two inches below the level of the navel. On admission,

℞ Pulv. Ipecac., ʒj; antim. tart., gr. i., M. ft. pulv. emetic.; statim sumend.

18th.—To have twelve leeches to the spleen, and take the quinine mixture, as in the last case, three times a day. Had a paroxysm to-day at the usual hour.

21st.—No fever since last report. To have a blister over the spleen, and take the spleen mixture, (a) with quinine, three times a day.

28th. No return of fever. Spleen much diminished in size; is now very indistinctly felt; projects forward much less than formerly, but there is dulness on percussion as low as the umbilicus. No pain or tenderness. Discharged.

Case 3.—Francis Butler, aged 25, admitted October 21, 1851. Four years and a half in India; countenance sallow and cachectic; says he has had fever about twenty times since the first attack at Lahore; has had enlarged spleen about one year; has been ill five days; paroxysms begin daily about one p.m., and last till eight; spleen extends to within one inch of the middle line, and one inch below the level of the umbilicus; it is indurated and somewhat uneven towards the lower part; no tenderness, but a little pain occasionally; pulse feeble, 96; tongue slightly coated.

A purgative was administered on admission, and twelve leeches applied over the spleen.

Oct. 22.—℞ Mist. quinæ disulph., ʒi. ter die.

23rd.—No return of fever; skin moist; pulse 80.

℞ Pulv. jalap, comp. ʒi.; infus. sennæ, ℥ij. statim.

24th.—Eight leeches to the spleen.

25th.—Rep. haust. aper.

26th.—To take the spleen mixture with quinine.

28th.—Spleen much diminished in size; extends now as low as the umbilicus, the inner edge being about two inches from the middle line. It is still indurated, but he has no pain. Discharged.

Case 4.—James Hoy, aged 20, admitted October 18, 1851; six years in India. Says he has not been free from fever more than ten days at a time since he came to this station.

Has been ill four days; paroxysms come on every day, but are rather irregular in their time of commencement. On admission,

℞ Pulv. jalap. comp. ʒi.; infus. sennæ, ℥ij. statim.

Oct. 19th.—℞ Mist. quinæ sulph., ʒi. ter die.

20th.—No fever to day. To continue the quinine.

This patient had no disease of the spleen that could be detected, but the liver was somewhat enlarged, and the recti muscles tense and hard. He complained of pain about the umbilicus, which was relieved by a blister. Discharged on the 23rd.

Case 5.—Charles Robinson, aged 25, admitted Oct. 16; five years in India. Has had fever twice before. Has a paroxysm every day, commencing at 1 p.m.

There is now slight pyrexia, thirst, and rather dry tongue. Pulse 100, sharp, but feeble. No headache. No enlargement of spleen.

On admission, haust aper. statim.

Oct 17th.—Mist. quinæ disulph. ʒi., ter die.

Had his usual attack to-day, accompanied by severe headache, for which twenty leeches were applied to the temples.

18th.—Better to-day; no headache; pulse 72; tongue slightly furred, but moist.

22nd.—No fever since the 17th. Discharged.

Case 6.—Patrick Byrnes, aged 26, admitted Oct 22nd, 1851. A stout-made man, but pale and cachectic. Four and a half years in India. Has had fever very frequently. Paroxysms come on daily about noon. Pulse feeble, 80. Tongue slightly coated. Spleen enlarged and indurated; lower border two inches above umbilicus; inner border one inch to left of middle line. No pain or tenderness.

On admission, haust aper. statim.

Oct 23rd.—℞ Mist. quinæ disulph., ʒi. ter die.

Eight leeches over the spleen.

24th.—Purgative and leeches repeated.

25th.—Had no fever to-day, for the first time since his admission.

To take spleen mixture with quinine.

28th.—Feels quite well; spleen considerably reduced in size. Discharged.

Case 7.—Edward Evans, aged 24, admitted October 21, 1851. One year in India. Has never had fever before. Paroxysms are very slight, beginning daily at 1 p.m. and lasting little more than an hour. Tongue clean; pulse 100. There is some engorgement of the spleen, which is felt as a soft globular tumour beneath the cartilages of the ribs. On admission,

℞ Pulv. jalap. co., ʒi.; infus. sennæ, ℥ii.; statim.

Oct. 22.—℞ Mist. quinæ disulph., ʒi. ter die; 12 leeches over the spleen.

Had his accustomed paroxysm to-day, but at 3 p.m.

23rd.—No return of fever.

25th.—Repet. haust. aper.

26th.—Seems quite well. Enlargement of spleen has completely disappeared. Discharged.

These few cases will afford you an example of the intermittent fever as we now have it at Meerut, and of the mode of treatment adopted. A purgative is usually administered in the first instance, or an emetic if the tongue be very foul, or there be symptoms of a loaded state of the stomach, after which the quinine proves invariably a successful remedy. The patients are restricted to sago diet until the disease begins to give way, when a little chicken is allowed. In cases complicated with simple engorgement of the spleen, a few leeches and a purgative once or twice repeated are the only additions made.

Where there is chronically enlarged and indurated spleen with cachexia, purgatives, leeches, blisters, and the spleen mixture; the

(a) The following is the formula of the spleen mixture, as recommended by Mr. Twining:—

℞ Pulv. Jalapæ, pulv. zingiberis, pulv. columbæ, pulv. rhei, potass. supertartr. aa ʒi; ferri sulphat., gr. x; tinct. sennæ, ʒiv.; aquæ menth. sativæ, ℥ x., M. ft. mist. capt. ℥ iss. bis terve die.

iron contained in this preparation seems especially beneficial in such cases, though I have not had time to observe its efficacy in curing them. We still adhere to Mr. Twining's formula, generally administering it in such doses as shall operate freely on the bowels three or four times a day. You will see that Cases 2, 3, and 6, improved greatly under this treatment; but whether the spleen in these instances was at all reduced within its former dimensions during the intervals of health, I am not in a position to state; but it seems most probable that the decrease of size was due only to the removal or diminution of the engorgement consequent on the attack for which they were admitted into hospital.

GENERAL CORRESPONDENCE.

OBSERVATIONS ON DR. FOLEY'S REMARKABLE CASE OF GESTATION.

I.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your Journal of 31st January, of this year, p. 104, contains an account of a "Remarkable Case of Gestation," by Dr. Foley, who expresses the "hope that some of the numerous readers of the *Medical Times and Gazette*, practising the 'obstetric art,' may have an opportunity of stating the extent to which they have observed such deviation from Nature's usual proceedings." This also implies that you yourself are open to receive such information through your Journal, and which I know to be the case. I have, therefore, much pleasure in referring Dr. Foley, and other readers of the *Medical Times and Gazette*, to Mr. Thomas Underhill's "Anomalous Case of Pregnancy: Absence of Fœtus," in your excellent Journal of 17th May, 1851, and to my answer thereto, which you had the politeness to insert on the 7th June following. Presuming such of your readers as are sufficiently interested in Nature's curiosities in gestation in the human female will refer to these cases, I will remark, that Dr. Foley's case comes under the head of "Blighted Ovum," more or less prolonged in utero, without putrefaction, and with or without a double conception. I have had many of these cases, both single and double, yet not one resembling Dr. Foley's, where the blighted ovum has come away first in a double conception, the second being retained with a living fœtus. I will, therefore, enter into the dates of the case, feeling assured that the explanation will be satisfactory.

Dr. Foley was called to his case first "towards the end of last May;" the time is somewhat indefinite, but I may be allowed to put it about the 27th. The patient described herself as having reached the third month of pregnancy, I will therefore place her probable time of conception about the 18th March, 1851; and the table of dates and days from this time, with the lunar months, will run thus:—

			Lunar Months.	
March.....	13 days.	.....	28 days.	
April	30	,, ...	28	,,
May.....	31	,, ...	28	,,
June	30	,, ...	28	,,
July.....	31	,, ...	28	,,
August	31	,, ...	28	,,
September	30	,, ...	28	,,
October	31	,, ...	28	,,
November	25	,, ...	28	,,
	252		252	

On 27th May, about the middle of the third lunar month (seventy days) of her pregnancy, a blighted ovum is discharged, and "on the sixth day, and for each day for a week after, she complained of gnawing pains through the abdomen, and frequent discharges from the uterus of black offensive grumous material." This then completed the effects of the discharge of a blighted ovum, part of a double conception; the living ovum remaining, and fructifying until the ninth lunar month of 28 days of utero-gestation.

On the 25th November she gave birth to a "perfectly formed, but very small and weakly child, that lived for three days; it was scarcely able to swallow food, and suffered severely from convulsions until its death."

There is, therefore, no doubt that a blighted ovum was retained to the tenth week, and then came away, showing no signs of putrefaction, or Dr. Foley would have noticed it, and which he calls a "mole;" this, at least, with all due deference be it said, is an unphysiological denomination, as was justly remarked by Dr. Denman, if a result of conception; as a "mole," by ancient authors, was in fact anything that the uterus discharged in a lump or mass—from an organised to an unorganised body—from a polypus to a coagulum—the term, therefore, being so imaginative, I have, by the way, drawn attention thereto.

No doubt the living ovum became affected by the loss of the blighted ovum, and the subsequent discharges; but had the birth been retarded for another twenty-eight days, making the natural time of a ten instead of a nine lunar month pregnancy, the child would probably have been a strong and healthy one. This is the first case I remember of a blighted ovum coming away before the birth of the living child, when there has been a double conception. In all the cases of double conception that have come under my own observation, the blighted ovum has come away after the birth of the living child. When the ova of a double conception have been blighted, a few days have only elapsed between their expulsion.

Dr. Foley inquires:—1st. "Can a double conception, contradistinguished from 'superfœtation,' take place in the human uterus?" and, 2ndly, "Could the uterus cast off one, and retain the other, bringing it to maturity?" His own case will fully answer the last question, as indeed it may also the first; but I beg to refer him to my work on "Physiology of the Uterus," &c., wherein these facts have been fully explained; also to the *Lancet*, of 12th August, 1848., p. 177; of 15th April, 1848, and 29th April, 1848; also to the *Medical Times*, as above stated; and I will, Sir, conclude this paper as I commenced the last to you, of 7th June, 1851, by remarking, that "consecutive communications in medical Journals tend greatly to the clearing up of interesting and doubtful points in the practice of medicine."

I am, &c. Benjamin Ridge, M.D.

Putney.

II.

[To the Editor of the Medical Times and Gazette.]

Sir,—I shall feel obliged if you will insert the accompanying case in your valuable Journal, it being a similar one to that communicated by Dr. Foley, in your Number of the 31st. ult., under the title, "Extraordinary Case of Gestation," and remain, Sir, &c.,

David J. Williams,
District Surgeon-Accoucheur to Queen Adelaide Hospital.

19, Dorchester-place, Blandford-square.

I was consulted by Mrs. T—, in the early part of May last, for an irritable and swollen condition of the mammary glands, which had existed, she told me, for some months, but had lately become more painful. From their appearance, as well as some other symptoms, I prognosticated pregnancy, dating it from the last menstrual period—February. My patient was quite opposed to this theory, stating her own as well as the age of her youngest child, (eight), and attributing the symptoms rather, as women frequently do, to the turn of life.

On the 30th of this month (May), after suffering great pain in the back and pelvis for some hours, she was suddenly seized, while dressing, with profuse hæmorrhage, in quantity sufficient to fill two chamber utensils, as well as saturate her clothing. A large fleshy substance, and some smaller portions, were expelled at the same time, (unfortunately disposed of before my arrival.) From the effects of this miscarriage she was confined to her bed-room ten days; the lochial discharge subsiding about the third.

Notwithstanding this occurrence, I still maintained my opinion of her pregnancy, for, excepting a slight diminution in size, the other symptoms were still present.

In two months from this date, "June 10," fœtal respiration was heard, and, in the beginning of December, Mrs T— was delivered of a full-grown healthy child, without any untoward symptom.

III.

[To the Editor of the Medical Times and Gazette.]

Sir,—Permit me, through your columns, to make a few remarks in answer to two questions propounded in connexion with a "Remarkable Case of Gestation," reported by Dr. Foley in your Journal of 31st Jan.

The questions are these: "Can a double conception, contradistinguished from superfœtation, take place in the human uterus?" and, "Could the uterus cast off one, and retain the other, bringing it to maturity?" The possibility of a second conception in the human uterus taking place, as the result of a second connexion, is, I believe, thoroughly established, provided the second impregnation take place a short time after the first, before the first ovum has entered the uterine cavity, and the canal of the cervix uteri become closed by the gelatinous secretion of the glandulæ nabothi, for in the case of twins, it by no means follows that the two ovules should have been impregnated at one and the same coition, although certainly the contrary is most commonly the case.

In the event of a double conception, if from any cause one of the ova become blighted, the uterus can expel that one, retaining the other, and bringing it to maturity. Many well-authenticated cases of this kind are recorded; so that I cannot agree with Dr. Foley in thinking that it would not be difficult to find many who would deny the possibility of a uterus retaining an impregnated ovum under such a state of things—at any rate, not among those conversant with the obstetric art.

To render the details of the case more complete, perhaps Dr. Foley will have the kindness to inform your readers the age of his patient; the interval elapsing between each pregnancy; the number of abortions (if any); and if a vaginal examination was made on the night he was first called to her.—I am, &c.

FRANCIS P. CUPISS, M.R.C.S. Eng., etc.

Croydon, 65, High-street.

LARGE DOSES OF ARSENIC.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your Number for the week ending January 24, contains a communication from a Correspondent who signs himself "Devizes," expressing incredulity of the fact of the alleged recovery of a child who had swallowed 15 grs. of arsenic.

As the signature "Devizes" imports, I presume, that the writer is connected with this town, perhaps the following case may be interesting to him, as the circumstance of its having occurred in the neighbourhood of it will afford him the opportunity, should he desire it, of verification.

On the afternoon of February 1, 1851, Mrs. Baker, of Hurstmill, near Morton, while engaged in sprinkling a slice of bread and butter(a) with arsenic to poison rats, was suddenly called away, and on her return found that it had been eaten by one of her children, a boy of 11 years of age. After some little delay, she administered an emetic of antimonial wine, which acted; and on the arrival of medical assistance it was repeated, and the other means required were, of course, employed. I saw the patient on the following day, and he was then suffering from vomiting, diarrhœa, tormina, &c.; and the abdomen was tender and tympanitic. The vomited matters, on examination with the silver and copper tests, gave faint traces of the presence of arsenic. The appropriate treatment (leeches, sinapisms, opiates, etc. etc.) was adopted; the symptoms abated, and in a few days he was convalescent. I have lately seen him, and find that he is now in good health, and has been so ever since, no permanent bad effect having resulted. The time which elapsed between the swallowing of the poison and the first occurrence of vomiting was, as nearly as could be calculated, half an hour, and, from the necessary incidental delays, could not have been less. The arsenic was taken from a newly purchased ℥i. packet, which was opened for the purpose, and tied up again immediately. On taking it to the chemist from whom it had been procured a day or two previously, (Mr. Barnard, of this town,) and weighing it with the papers and strings exactly as it had been sent out, the loss of weight was found to be 19 grs., or, to be quite accurate, between 19 and 20; and there can be no doubt that this was the quantity taken.

It should be stated, that the patient had taken a meal (tea) not long before the poison was swallowed; and to this circumstance, and to the mode in which the arsenic was taken, (enclosed in bread and butter,) his escape from a fatal result is, no doubt, to be attributed.

As cases similar to this have been before recorded,(b) I should not have considered that, on the score of novelty or interest, it would have been entitled to publication; but the considerations that the scepticism expressed by your Correspondent may be shared by others, and that every fact which tends to remove doubt or uncertainty from a subject so important in its legal and social relations as that of poisoning, thus acquires an importance which may not intrinsically belong to it, induce me to request your insertion of it.

I have abstained from minute detail of symptoms and treatment, as my object has been simply to state an instance of a considerable dose of arsenic having been swallowed with comparative impunity.

I should mention, that the case was seen by Mr. Anstie, surgeon of this town, as well as by myself.—I am, &c.

Devizes. W. G. EVERETT, M.D.E. etc.

(a) It should, perhaps, be mentioned, that the bread and butter was what is termed "doubled."

(b) I may refer, *inter alia*, to a Paper by Dr. Ogsden, of Aberdeen, in the *Medical Gazette* of Jan. 31, 1851.

MODE OF FIXING ARTIFICIAL TEETH.

[To the Editor of the Medical Times and Gazette.]

SIR,—Trusting you will pardon my thus intruding on your valuable columns, but seeing a description in your Number for Jan. 31, of an improved method of fixing artificial teeth, by Mr. C. Stokes, I would offer a few remarks thereon.

Mr. Stokes states, that he attributed the cause of caries to arise from the re-action of the acidulated pulp lodged between the clasp for supporting the bone frame and the teeth, and he, consequently, substituted a gold plate, supported by elastic wooden vertical clasps.

Now, as many persons who have been in the habit of wearing bone pieces, cannot easily be induced to have a gold plate instead of ivory inserted into the mouth, and, as Mr. Stokes's plan is applicable only to plate, I will mention a mode that I adopted some few years since under almost similar circumstances, and with the greatest success. It was the use of horizontal compressed wooden plugs, which pressed against the teeth a little above the neck, and not, as in the case of the vertical clasps, against the top or near the crown of the tooth, which cannot be avoided in many cases, particularly in that of a tooth smaller at the neck; for, if the wood is made so as to exactly fit the tooth, the plate cannot be pressed into its proper position in the mouth. Mr. Stokes also states, that "by preventing the lodgment of particles of food liable to undergo chemical changes, we necessarily remove an exciting cause," etc. How the wood clasp prevents this more than gold I cannot see, for, if a metal clasp sufficiently broad is properly fitted to a tooth, no food can collect. Wood also retains moisture, whereas gold does not; and it is also a disputed point whether caries is caused from the accumulation of food under the clasp or from friction; the latter is more generally the case, as is proved by the adoption of broad plate clasps instead of wire ones, which were in most cases used until within the last few years, cutting the tooth very severely. But even supposing Mr. Stokes's argument to stand good, it would be in favour of the horizontal plug, as it, being so much smaller than the vertical, would consequently diminish the lodgment of food.

I would give great credit to Mr. Stokes for his improvement, which he certainly deserves, but still I maintain that the horizontal plugs can be applied to both gold and ivory, with far greater success in many instances.

As this may be useful to some who have not yet tried it, I trust you will find it a corner in your widely-circulated paper.

I am, &c., FRED. C. SCOTT.

Swansea.

MEANS OF APPLYING NITRATE OF SILVER IN SOLUTION TO THE URETHRA.

[To the Editor of the Medical Times and Gazette.]

SIR,—I wish to bring before the Profession, through the medium of the *Medical Times and Gazette*, an instrument which I had constructed for the purpose of applying a solution of nitrate of silver to the urethra and prostate.

In the year 1849, having had occasion to treat a great number of cases of urethral disease, and, having ascertained the great efficacy of nitrate of silver, particularly in some forms of gonorrhœa and gleet, I was anxious to obtain some means of applying this agent, in a fluid form, to any part of the urethra. I accordingly mentioned my wishes to Mr. Matthews, the surgical instrument-maker, in Portugal-street, Lincoln's-inn; and suggested to him that the object could be best effected by an instrument so adapted as to carry a small piece of sponge, which might be protruded from its cavity at pleasure. Mr. Matthews accordingly, in the year 1849, constructed the instrument I now delineate, and which I have used on many occasions.

Originally I had intended it for cases of gonorrhœa and gleet; but since it has been introduced, it has been found very efficient as a means of applying nitrate of silver in the fluid rather than in the solid form, in cases of spermatorrhœa.

As Mr. Henry Thompson has, in another journal, published an account of, and depicted an instrument which is of very similar construction, I have thought it a duty, both towards Mr. Matthews as well as to myself, to describe the instrument introduced by us more than two years ago. At that time I showed it to Mr. Fergusson, Mr. Partridge, and to many other surgeons; and, indeed, I exhibited it to the members of the Westminster Medical Society, but otherwise never described it. I cannot for a moment suppose that Mr. Thompson had seen or heard of the instrument; but the following notes, from Mr. Matthews and

Mr. Henry Lee, will show that what amount of originality the instrument may possess is due to Mr. Matthews and myself.

"10, Portugal-st., Lincoln's-inn,
"January 27th, 1851.

"Dear Sir,—In answer to your inquiries respecting the instrument for applying the solution of nitrate of silver to the urethra, I find that I made it, according to your instructions, in the spring of 1849, and I am surprised that it should be considered a new invention in January, 1852, for it was in my case of instruments at the Great Exhibition of 1851, where I had the pleasure of showing it among my instruments to the jury, and more especially to Mons. Lallemand, who will recollect it.

"I am, dear Sir, your obedient servant,
"W. Matthews."

"My Dear Sir,—I have used your instrument for applying solution of nitrate of silver to the urethra for the last two years, and have found it very serviceable in cases of spermatorrhœa.

"When Mr. Matthews first showed it me, he mentioned it as having been introduced by you.

"Believe me, yours very truly,
"13, Dover-st., Feb. 3, 1852. "Henry Lee.
"Henry Smith, Esq."

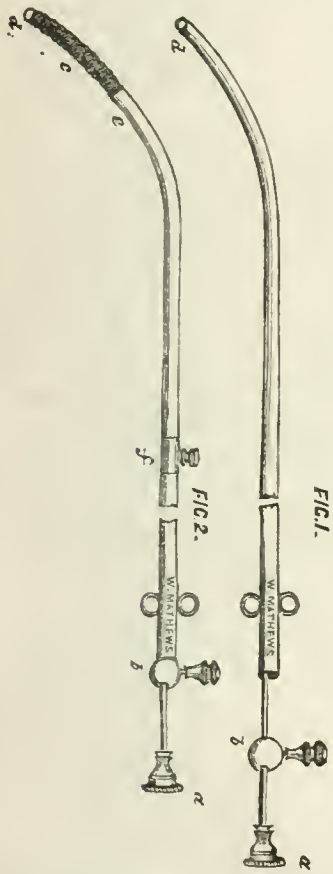

Fig. 1. The instrument closed.
Fig. 2. Instrument open.
a. Stilet and handle, to the opposite end of which the sponge is attached.
b. Screw for regulating the distance of sponge required, and for fixing it for introduction.
c. Sponge.
d. Silver bulb, which closes the canula.
e. Canula.
f. Moveable slide.

Since writing the above, I have had some communication, as well as a personal interview, with Mr. Thompson; and I must do that gentleman the justice to say, that he acknowledges never having seen or heard of my instrument; and therefore it is far from my wish to take away from him any credit which may belong to him. I may now mention, Sir, that having had my attention called to the paper of Mr. Thompson in the *Lancet*, by a friend in the country, who had seen me use my instrument, I, at his suggestion, wrote a note to the editor of that journal, in which I stated the facts of the case, and asked him to do me the simple act of justice due to any one under like circumstances. The result was, as may be seen, by referring to the Notices to Correspondents in the *Lancet* of the next week, not only a refusal to publish my note, but a cunningly devised endeavour to insult me. I say endeavour, because I well know, that any such attempt, coming from that quarter, will be appreciated in its proper light. He may rest assured that his malice can do no reputable man any injury whatever, while it will most surely, one day or other, recoil upon his own head. And further, to show you and your readers how much reliance is to be placed upon the *Lancet*, I will only mention the fact, that, although it was stated by the editor that my letter had been forwarded to Mr. Thompson, it in truth had never been sent to him; that he only obtained the document some days after it had been publicly announced that it had been transmitted to him; and that only after having made an application to the editor. After this statement, I need say no more. I am, &c. Henry Smith.

13, Caroline-st., Bedford-square.

ON THE FINAL CAUSE OF MENSTRUATION.

[To the Editor of the Medical Times and Gazette.]

Sir,—The paper by Dr. Ramsbotham, published in your Journal, January 17th, is one which possesses much interest, and has a direct bearing upon certain views with regard to the physiology and pathology of the uterine system. For myself, this paper also has a more direct interest, inasmuch as I have on another occasion (a) endeavoured to point out that the ovular theory of menstruation has not yet received such an amount of proof as should serve, upon inductive principles, to admit it among the facts of medical or physiological science. At the same time I showed that I am not alone in holding this opinion, but have the concurrence of some high authorities. For these reasons, then, I solicit the favour of a small space, with the view of eliciting further information upon this subject.

In the last edition of Dr. Ramsbotham's very valuable and beautifully illustrated work on the "Principles and Practice of Obstetric Medicine and Surgery" (which every obstetric practitioner must desire to possess), we find a similar statement to that contained in the paper above alluded to; viz., that "the theory is strengthened in a way that amounts almost to a positive confirmation by the researches of Dr. Letheby, who, in two instances, detected the ovule in the Fallopian tubes of girls that had died during the continuance of the menstruous action."—(*Med. Times, loc. cit.*) And "thus has been confirmed the suspicion so long entertained, that in the human female the maturation of the ova and their discharge from the ruptured follicles takes place periodically at the epochs of menstruation."—("Principles and Practice," p. 47.)

I have the greatest respect for the judgment and the acquirements of Dr. Ramsbotham, and am quite sure, from my personal acquaintance with that gentleman, that he will not expect me to assent to any doctrine on his mere *dictum*, if my reason be not convinced; and this is the case with this supposed demonstration of the ovular theory of menstruation.

To avoid trespassing upon your space, I will not enter upon the objections which have been before adduced, but will confine myself to soliciting, through your pages, further information upon the one fundamental point as arising out of Dr. Ramsbotham's communication.

1st. I would ask if Dr. Letheby submitted the objects discovered by him to the examination of Dr. Ramsbotham, or any other physiological observer? I by no means intend to impugn Dr. Letheby's accuracy; but, upon so essential a point as this, I am entitled to ask for the most complete satisfaction and conjoint testimony. An ovule, at the time indicated, must be a minute and delicate organization, very difficult to be recognised or affirmed of. Moreover, Dr. Ramsbotham does not state whether Dr. Letheby has preserved any evidence of the characters of the objects seen by him, and stated to have been ovules.

2ndly. Admitting, however, the correctness of Dr. Letheby's observations, I would suggest that, at the present time, they record mere coincidences. The discharge of ova from the ovaries of unimpregnated females is undoubted; but the statement of the only two instances in which this function may have been demonstrated to have been coincident with that of menstruation, does not supply all the links wanting in the chain of evidence to connect the two processes as cause and effect. Menstruation, we know, is periodical; ovulation, also, we know, is not strictly periodical, but occurs at uncertain intervals; *e. g.*, at and between the menstrual periods, before the establishment of the catamenial flow, and after its cessation. It may, therefore, justly be doubted whether so small an amount of facts as have yet been ascertained are enough for the construction of the theory. The same observation must be repeated many times to give it due weight.

The objections here raised affect the whole theory; they place or displace the foundation-stone of the entire superstructure, according as they may or may not be refuted. There would, however, still remain many obscurities involved in the consideration of the physiology of conception, as arising out of the ovular theory of menstruation; but these would certainly receive a large accession of light if the theory should be as satisfactorily demonstrated as has been (it seems to me too readily) assumed by Dr. Ramsbotham.

I am, Sir, &c. W. B. Kesteven.

Upper Holloway.

(a) *Medical Gazette*, Vol. IX. (New Series), p. 930.

THE MONUMENT TO JENNER.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have perused, with great regret, the letter of your correspondent on the subject of the Jenner Monument, not so much from any fear of its injuriously affecting the progress of the subscription, as from the tone and temper it evinces, and from the proof it gives that the spirit which opposed the great discovery of Dr. Jenner during his lifetime, has not ceased its efforts fifty years afterwards,—that men are to be found who, instead of welcoming every occasion of raising their testimony to his memory, are inclined to cavil about details, and substitute for anything proposed some other idea, even although its tendency may be to inoculate future ages with principles the most opposed to those of the great discoverer of vaccination.

With regard to the motives imputed to Mr. Marshall, his high character is of itself a sufficient refutation of them. Twenty-five years have elapsed since the death of Dr. Jenner without any successful step being taken to provide a suitable monument for him; and it is notorious, that a thousand most favourable opportunities of doing so have been allowed to slip away. In fact, the claims of Dr. Jenner were almost entirely forgotten when Mr. Marshall again called attention to the subject; and, therefore, as the originator of the present movement, he has, as your correspondent observes, a just and undoubted claim to be the executor of its own idea. Under these circumstances, the plan you propose, of a public competition, is utterly futile and unnecessary; for so high is the honour of our English sculptors, that they would at once decline entering into it, feeling that they would as soon be guilty of petty larceny as of pirating the idea of a brother artist.

As to the supposed difference between the first and second Committee, the enclosed list will show you, that the latter includes every member of the former, with one or two exceptions. At the same time, allow me to correct an error of your correspondent. Dr. Forbes was Chairman of neither of the Committees, Dr. Conolly being the President of both.

In conclusion, I have great pleasure in informing you, that the subscriptions already announced, and in particular those from America, guarantee the success of the present scheme; and that the statue of Dr. Jenner, which his son has pronounced to be an admirable likeness, will be erected at no distant period. If Great Britain hang back on the present occasion, she will merely lose another, and, from experience of the subject, I should say the last, opportunity of testifying to the merits of Dr. Jenner, and will incur the disgrace of being the only nation who refuses to perpetuate the fame of her most deserving son, while she permits foreigners to perform the duty which is primarily incumbent on her. I am, &c.

GEORGE VERE IRVING, Honorary Secretary.

10, Ampthill-square.

[When the remarks in our last number upon our correspondent's letter were penned, we were not aware that Mr. Marshall had originated the idea of the statue to Jenner; that he had greatly exerted himself to procure subscriptions; and, so far from desiring any pecuniary benefit, he had intimated to the Committee, that he required nothing more than his mere outlay for the work. These facts materially change the features of the case; and we are glad that the subject has been brought under the immediate notice of the Profession, especially as the opinions we expressed are extensively entertained.—ED. *Med. Times and Gazette.*]

MR. B. SMITH'S MORTALITY TABLES.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you permit me to suggest to your excellent and talented correspondent, Mr. B. Smith, the great advantage which would result from the separate publication of his Table published in your number of Jan. 17.

We have within the limits of one of your pages a Table showing at one glance the weekly mortality during the whole year in the London division; the number of deaths which occurred in each of the classes of disease; the age and sex of those who died, and the districts in which they died; also the weekly number of births of each sex; and added to this we find all the important information on meteorology, including barometric pressure, temperature, rapidity and direction of the wind, and the amount of rainfall.

This Table gives all this information correctly, and in a more accessible form, than any one previously published by any individual, and would be a great convenience to medical men and the thoughtful public in general.

I suggest that it be printed upon paper which, with the envelope, will not exceed half an ounce in weight, and be published at twopence each copy; and also that the column for "weeks" be printed at both ends of the Table. I am, &c.

EDWARD SMITH, M.D.

16, Norfolk-terrace, Westbourne-grove.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. LATHAM, President, in the Chair.

Dr. Bristowe presented a specimen of

HYDATID ABSCESS OF THE LIVER, OPENING INTO THE RIGHT PLEURAL CAVITY.

W. W., a chairmaker, aged 20, was examined the 24th November, at 1 p.m., having died at 2 a.m. the same morning. For three years he had been ailing. A month before his death he is said to have had a very severe attack of fever, accompanied by intense pain in the right side, and at this time enlargement in that neighbourhood was first noticed. It is most probable that the attack of fever marked the occurrence of suppuration of the hydatid cyst. The fever diminished, but the pain and swelling of the side continued, or rather increased, up to the time of death.

At the *post-mortem* examination he was found extremely emaciated. The right side of the chest and abdomen was very prominent and bulging; the parietes tense and smooth; large veins were seen running superficially over the right hypochondriac region and lower part of the chest, and numerous hæmorrhagic spots were scattered over this part. At almost the first incision through the cartilages of the right ribs, a small amount of somewhat offensive gas escaped, together with a quantity of thin, yellowish pus, in which were floating numerous hydatids; these were all collapsed or broken, and of a yellow colour, many containing large bubbles of air. On laying open the chest, the pleural cavity was found full of fluid similar to that which had escaped, its amount being several pints. The lung was collapsed, airless, and much reduced in size, covered by a layer of opaque, buff-coloured, somewhat soft fibrine, a portion of which glued the lobes of the lung to one another, and the base of the lung to the diaphragm. The parietal pleura was similarly covered. Immediately in front of the root of the lung, the fibrinous deposit was more abundant, and there was a small quantity of thick creamy pus, which, on applying pressure to the liver, was somewhat, but very slowly increased in quantity. The liver was very large, extending from below the umbilicus to the space between the fourth and fifth ribs. The left lobe was somewhat larger than natural, but the great increase in bulk was due to enlargement of the right lobe, which seemed almost entirely converted into a large fluctuating cyst. The liver was adherent above to the diaphragm, but free elsewhere. On making a section through the anterior part of the cyst, a large quantity (four or five pints) of thick, white, creamy pus escaped, together with numerous hydatids, resembling those obtained from the pleura in every respect, except that of containing air. Among the hydatids was one imperfect, but of very large size, which had probably, previous to the occurrence of suppuration, formed the lining of the cyst; this was very adherent at one part, and, on removal, a portion of it was found crumpled up, and deeply stained with bile. On washing out the cyst, its parietes were seen to be formed of a firm, whitish, fibrous material about a line in thickness, not laminated nor containing any earthy deposit, but presenting a somewhat reticulated surface, and in places arborescent markings, evidently the remains of obliterated vessels. At the upper part, where adherent to the diaphragm, the cyst wall was thicker and firmer than elsewhere, and made up of condensed liver-structure and diaphragm inseparably united; this was partially destroyed in places by small, well-defined, sinuous ulcers, and was circumscribed also by ulceration, which had in many places laid bare the muscular fibres of the diaphragm; this was especially the case on the inner side, where they were exposed and perforated; the orifice, however, was in great measure plugged up by a considerable quantity of the lining of the cyst, which had been partially detached by ulceration. It was through this opening that the communication with the pleural cavity was established. At the posterior and lower part of the cyst was a somewhat valvular, oblique opening, large enough to admit the tip of the forefinger; it was found to be the orifice of the right hepatic duct, at about two

inches from its junction with the left; the duct between these points was dilated and pale, contrasting remarkably with the left and common ducts, which were stained with bile; it was here beyond doubt that the large hydatid before mentioned had become fixed. This explains the adhesion that was noticed, the crumpled and bile-stained appearance of part of it, and also the paleness of the duct itself. On examining closely the parts in the neighbourhood of the orifice, it was seen that the posterior wall of the duct was prolonged in a branching form for some distance on the posterior wall of the cyst; that the prolongations were smooth and polished as the duct itself, distinctly marginated, and presenting the orifices of other ducts, along some of which a probe could be passed for some distance. The walls of the cyst were about a quarter of an inch thick in front, and half that behind; they were made up externally of flattened liver structure, and internally of the proper fibrous cyst-wall; the two, however, were inseparable, and passed gradually one into the other. The former presented microscopically an increase of fibrous tissue, with an almost entire absence of liver-cells, which were replaced by granules of oily material free and clustered; the latter presented almost the same characters, except that the granular material was in smaller, the fibrous in greater, quantity. The microscopic characters of the left lobe were normal. The heart was very much pushed over to the left side, but that and all the other viscera were healthy. Besides the general interest of the above case, there are two or three minor points worthy of notice. 1st. The occurrence of air in the pleura—its presence in that situation, independently of pulmonary lesion, is very rare. In this case, though not noticed, it undoubtedly existed during life, and there is every reason to believe it was due to decomposition in the hydatids themselves, as the air was found not only free, but enclosed within them. 2nd. The contents of hydatid abscesses of the liver are usually tinged with bile, whereas here they were almost a pure white, even though a large bile-duct opened directly into the cavity. It is certainly possible that the entrance of bile into the cyst was the primary cause of suppuration, and that the blocking up of the orifice by the hydatid prevented any further ingress of that fluid, and consequently enabled the contents to preserve their colour; but Dr. Bristowe was much more inclined to believe that in this case, and probably in many others, the suppuration was due to some other cause than extravasation of bile, and that the patulous state of the duct was a natural appearance resulting from the development of the hydatid within it. This is borne out by the facts, that there was no appearance of anything like ulceration in the neighbourhood of the orifice, that the duct opened abruptly into the cyst, instead of presenting a lateral ulcerated opening, and that its continuation on the wall of the cyst was smooth, polished, and with even margins; and it can scarcely be imagined that ulceration should have perfectly destroyed one half of its calibre, leaving the remainder in the healthy and perfect condition in which it was found.

Mr. Stanley presented a specimen of

GREAT ENLARGEMENT OF THE HEAD, OCCASIONED BY A MORBID GROWTH FROM THE CRANIAL BONES.

This occurred in a farmer's boy, aged 15, who had been repeatedly struck upon his head with the handle of a pitchfork. On one occasion the blow was so severe that it stunned him, and about a month afterwards the perceived a lump upon the top of his head, which gradually extended through the following two years over the whole of the superior, lateral, and posterior parts of the cranium. The form of the swelling was such, that being covered by the scalp stretched over it, the aspect was that of an additional cranium growing from the vault of the skull. The increase of the morbid growth was accompanied by severe pain in the head, also by great enlargement of the blood-vessels of the scalp, and by loss of sight, first in one eye, then in the other. At length sloughing and suppuration ensued in the scalp, as the consequence of its stretched and inflammatory condition, and after severe suffering for nearly three years, convulsions ensued, under which he sank. On examining the head, a morbid growth was found arising from the outer table of the cranium through the greater part of its extent, and a similar growth was found arising from the inner table, and thence extending into the cranial cavity, causing, by its pressure, absorption of part of the cerebral hemispheres. The cranial bones intervening between the morbid growths were found thickened and otherwise altered in texture. The morbid growth from the outer table of the skull was firm, and of a whitish colour; it had not the characters either of hard or soft cancer, nor was it fibrous. The morbid growth from the inner table was somewhat softer, and of a darker colour.

Dr. Jenner, who had undertaken to examine and report on the microscopical characters of the preceding specimen, detailed the appearances observed in different portions of the tissue, and concluded that they may be grouped under four heads:—1st. The normal elements of the parts more or less changed, *e. g.*, the nerve cells. 2nd. Fibro-plastic corpuscles, fusiform fibres, and free nuclei. 3rd. White fibrous and yellow elastic tissues. These, perhaps, owed their origin chiefly to the development of the fibro-plastic corpuscles; probably, however, they were partly the remains of the elements of the normal tissues of the parts. 4th. The products of inflammation, *e. g.*, the non-nucleated granular corpuscles, and molecular protein granules. In different stages of development, in different states of decay or degeneration, and variously combined and arranged,—these constituted the portions of the growth which he (Dr. Jenner) had for examination. A question may be entertained, whether in this case the fibro-plastic element, and, consequently, so much of the fibrous tissue as had its origin in it, may not have been developed from a blastema, the product of inflammatory action; certainly, fibro-plastic corpuscles and fusiform fibres are sometimes found on serous membranes, as the result of the development or organisation of inflammatory exudation matter, and it would appear to depend, partly at least, on the constitutional state of the patient to determine whether inflammation shall cause the exudation of simple fibrillating contractile lymph, a blastema capable of evolution into fibro-plastic tissue, pus, or granular corpuscles, and protein molecular granules. But, whether themselves originating in inflammatory action or not, it is universally admitted, that fibro-plastic growths are, like all vascular structures, capable of becoming inflamed, and to the inflammation set up in the growth itself the softening and the granular corpuscles seem in this case to have been due. In the parts in which these corpuscles and granules were the most abundant, fat was found in the largest quantity. This fact lends support to the opinion, that this form of exudation undergoes fatty degeneration with greater facility than most other forms. With reference to the question of malignancy, the only conclusion warranted by the microscopical examination is, that it was locally, but not constitutionally, malignant; at the same time, it seemed to him, that our acquaintance with the microscopical characters of morbid growths, the histories of which prove them unequivocally to have been constitutionally malignant, is not sufficiently extensive for a definite statement to be made on this point.

MEDICAL SOCIETY OF LONDON.

Dr. MURPHY, President, in the Chair.

DISCOLOURATION OF THE HAIR AFTER RINGWORM OF THE SCALP.

Dr. Crisp exhibited a child, aged nine years, who, twelve months since, was affected with porrigo scutulata. She was treated at two public institutions in London without apparent benefit. Her mother then took the case under her own care, and applied burnt butter, which was obtained by heating butter in an iron spoon. The head was likewise shaved. About five months since, when the hair began to grow on the porriginous patches, it was of a snow-white colour, and has remained so up to the present time, the hair being long and of its normal thickness. The child has generally been healthy, and presents no appearance of anæmia. Dr. Crisp had referred to several authors on skin diseases; but had not found a description of this discolouration. Would the use of the burnt butter account for the whiteness of the hair?

TWIST AND ADHESION OF THE UMBILICAL CORD.

Dr. Crisp also exhibited a portion of an umbilical cord, in which two loops were firmly adherent; a union that must have taken place at an early period of growth. The mother, a patient of Mr. Skegg, of St. Martin's-lane, was 33 years of age and generally healthy; the labour (the first) was protracted, the child's face being towards the pubes; delivery was effected by means of the forceps. The child was well formed, and of the average size; it lived about half an hour, the death probably being occasioned by the compression of the head. He inquired if any member present had seen a similar condition of the curd?

Dr. Murphy had never met with it; he requested Mr. Streeter, who had paid so much attention to the subject of the funis, to favour the Society with his opinion on the specimen before them.

Mr. Streeter agreed with the President in regarding it as rare, if not unique; for he had neither seen nor heard of a similar folding on itself and agglutination of the folds. He trusted that Dr. Crisp would inject the vessels, and then carefully examine with the microscope the kind and degree of amalgamation existing between the opposing amniotic and thecal coverings, and determine whether the four layers (the two amniotic and the two thecal) had simply adhered, or whether they had coalesced and grown into one insepa-

rable membrane. The theoretical explanation that suggested itself to his mind was not that of an arrested development and subsequent metaphorptic growth, but the simple one of a coil of the funis having taken place at an early period of pregnancy, the pressure of which between the body of the fœtus and the walls of the uterus, had led to adhesion of the opposing surfaces, and to a subsequent modification in the after-growth of the amniotic and thecal coverings of that part. Upon the cause and final purpose of the coiling of the funis, he had formerly addressed the Westminster branch of this Society, but as those original views had not as yet been fully or authentically printed, and as he had now become convinced, that this coiling of the cord was a frequent if not the sole cause of preternatural presentation at birth, he should be excused if he briefly re-stated those views. Till the fifth or sixth week, the embryo was depending and floating freely in the liquor amnii with its umbilical, or, more properly speaking, alantoid vessels, not twisted, as at birth, but passing in straight lines from the abdomen to the placenta. It is only when the two alantoid arterial streams become unequal, from slight inequality in the size of the vessels, or in the impulse received from the fœtal heart, that the twisting to the right or left observable at birth commences, and goes on increasing till the fœtus has grown too large for further gyration. When the walls of the uterus have stopped this, the twisting force generated by the spiral streams is expended in coiling the cord, counteracting its higher specific gravity than that of the liq. amnii in which it is placed, and thereby removing it from those depending parts of the uterus, where it almost inevitably receives a pressure at birth, that is fatal to the life of the child. He regarded this counteraction of the natural gravity of the funis, this communication of elasticity to inelastic materials by a simple modification of the circulation of the part, as one of the most beautiful instances of conservative design existing in the human frame. It occasionally fails from weakness in the child, or from impaction, and the funis is found to prolapse in about 1 in every 200 labours. The natural coil frequently passes over the head, and remains round the neck; in rare instances it escapes over the fœtus entirely, and forms a knot on the cord, the explanation of which has been so great a puzzle to systematic writers. When the coil carries up the head and supports it against its natural gravity, the breech naturally becomes the presenting part. Personal observations have corroborated this view in breech, but arm cases have not occurred for observation since to verify the conjecture. When the coil is single, it unfolds with the increasing size of the child; but when it is double and crossed, as in the sailor's knot, the fœtus is destroyed by the stretching of the vessels and interruption to their functions. In this way it leads to death of the fœtus, and to abortion in a less degree, and, when not fatal at once, to singular indentations on the body or limbs, and malformation and modifications of its after-growth. Of this he had seen some curious instances—one in particular which he had purchased from Mr. Langstaff's collection—and another now in the Royal College of Surgeons, born a few months ago, and for the opportunity of seeing which he was indebted to his neighbour Mr. Reeve. In this the thorax had been constricted; in his own preparation the abdomen was nearly cut in two.

Dr. Crisp added, that it might be a fact interesting to Mr. Streeter, that in his case the face of the fœtus was turned towards the pubes.

PECULIAR INFLUENCE OF MERCURY AT THE PRESENT TIME.

Mr. Henry Lee brought under the notice of the Society the very peculiar influence which he had observed to be produced by the action of mercury upon patients during the last four or five weeks. Mr. Lee introduced the subject by relating the particulars of a patient of his own in the Lock Hospital. In this a drachm and a half of mercury only had been rubbed in. On the fourth day the gums were observed to be affected, and the mercury was discontinued. It was not till a week afterwards that Mr. Lee's particular attention was drawn to the case; the patient's mouth and throat were then greatly swollen; a continued stream of saliva issued from the mouth; the tongue was so swollen that it could scarcely be moved; the pulse was small and weak, and the skin cold. On the following days the affection increased in severity. The effort at deglutition was so painful that scarcely anything could be given. This patient was removed from the ward into a separate room. She was ordered wine and whatever fluid nourishment she could take; she was also directed to use an alum gargle, and to take ten grains of the chlorate of potash three times a-day. Mr. Lee observed, that had this case occurred alone, he should have regarded it as dependent upon some peculiarity in the patient's constitution. But several other cases, not under his own care, had occurred in the Lock Hospital. Mr. Lee had also observed the peculiar depressing effects of mercury in private; and mentioned, that the previous day he had remarked a patient (a man of colour) who was admitted into King's College Hospital with his mouth and tongue so swollen that he was quite unable to speak. (This man had taken some purgative pills which contained mercury, and had rubbed in a small quantity of mercurial ointment.) These peculiar effects manifesting themselves in different parts of London, under the care of different medical men, clearly pointed to some general influence, which, for want of a better term, must be called atmospheric. The cases observed had almost exclusively occurred among women whose constitutions were weak. It appeared to Mr. Lee, that as there were certain times and conditions of the atmosphere when patients were peculiarly susceptible to depression from loss of blood or from surgical operations, so were there periods in which mercury, instead of producing its medicinal effects, was apt to act as a poison upon the system. In the case which fell under Mr. Lee's own care, the patient very rapidly recovered, much more so than patients do after severe salivation. Whether the medicine employed in this case, (the chlorate of potash) contributed to this result, or whether the affection reached its natural termination, Mr. Lee would not undertake to say.

Dr. John Webster was glad that Mr. H. Lee had brought this matter forwards, as it coincided with his own previous statements. This peculiar action of mercury on the system depends on the state of the atmosphere. The Profession should hesitate at giving that mineral when the barometer is low, and there is much moisture, with a south-west wind,—a state of atmosphere that, with the exception of the lowness of the barometer, has been prevailing for some weeks past,—for, while that state continues, very small quantities of mercury rapidly and most injuriously affect the system. When dry north winds blow mercury may be given much more freely, and with much greater safety.

Mr. Hunt inquired of Mr. Henry Lee in what proportion of cases per cent., during the last two months, he had met with this peculiar influence of mercury?

Mr. H. Lee replied, that he had noticed it in about half a dozen cases altogether, for the fact was, that when this result was noticed, his colleagues and himself became rather shy of exhibiting mercury.

Dr. Willshire's experience was rather contrary to that of Mr. H. Lee and of Dr. Webster. So far from finding small doses of mercury rapidly affecting the system, he had experienced considerable difficulty in many cases in inducing the specific action of the mineral, more especially in a case of endocarditis, in which he could not cause salivation, although ulceration of the gums was induced, and a sign he had never before seen, roseola mercurialis, was also found to be present. So far from the effects of mercury being induced with great rapidity and disastrously, he (Dr. Willshire) had for some time past found it very difficult to cause salivation.

Mr. Hunt confirmed Dr. Willshire's statement in full. He also had been unable to induce salivation in several cases in which he had lately tried to effect that object.

Mr. Dendy inquired the ages of the patients on whom Dr. Willshire and Mr. Hunt had endeavoured to induce salivation. Were they all adults or children, or were some adults and others children; if the latter were the case, was there any marked difference in the action of mercury on the children or on the adults?

Mr. Hunt replied that all his patients were adults.

Dr. Willshire stated, that his cases were partly adults and partly children, but chiefly the former. The case of endocarditis to which he had alluded occurred in a child.

THE UTILITY OF COPIOUS BLOODLETTING IN CASES OF CONGESTION AND INFLAMMATION.

Mr. Langley then read a paper upon this subject. He said, that he had long urged upon public attention, in the medical periodicals and otherwise, and practised, as he stated, ordinarily and with unvarying success, this novel and startling system, in which treble and sometimes quadruple the quantity of blood is abstracted in those diseases, as compared with the amount sanctioned by established practice. The paper consisted of three parts. The first stated, and purported to refute, the prevailing objections against bloodletting; the second referred to the theory applicable to the results of his (Mr. Langley's) experience, that theory relating principally to the effects of pressure upon the nervous system, and serous effusion produced by the enlarged diameters of over-distended vessels, the *vis à tergo*, and increased momentum. The last part consisted of a selection from a mass of cases diffused over a lengthened period of practice.

In the discussion that followed, several members took part; considerable opposition was offered to Mr. Langley's proposition,—some few, however, awarding him the faint praise, that in some

severe cases a modification of his views—*i.e.*, bleeding, but to a less extent—was available and requisite. Dr. Semple pointed out and dwelt upon the objections to Mr. Langley's practice in a speech of considerable length, and showed that the abstraction of blood, like the employment of all other remedies, must be modified on account of various contingencies, such as age, sex, penury of constitution or otherwise, influence of locality, the state of the temperature and atmosphere, the presence or absence of epidemics, etc. etc., none of which had Mr. Langley taken into consideration. He also showed that many diseases of the inflammatory and congestive class are curable by other remedies, and therefore that bleeding should not be indiscriminately employed, especially to so large an extent, as injurious consequences have often resulted from extreme abstractions of blood. He expressed great surprise at Mr. Langley's statement, that dropsy was always curable by bloodletting, he (Mr. Langley) utterly forgetting that it may be caused by valvular disease of the heart, wasting disease of the liver, or by obstructive disease of the lungs, in any of which cases the abstraction of blood must hasten the progress of the sufferer to the grave. He considered that Mr. Langley's sweeping assertions in favour of extensive bloodletting must be greatly modified. There were other diseases in which Mr. Langley had employed venesection, but in which Dr. Semple could not concur, as, for instance, in commencing phthisis; as by the loss of blood thus practised the disease is driven on to progress much more rapidly than before, as is shown in cases of that disease where blood is abstracted for intercurrent pneumonia. The inflammation is removed, but the phthisical symptoms advance in a more rapid ratio. There is no doubt, he added, that the abstraction of blood may and will do good in some cases of disease, but in others it will do a great deal of harm. A feeling is growing up in the Profession, that bleeding is unnecessary in many diseases in which it was formerly employed, as, for instance, in commencing pneumonia and pleuritis; the inflammatory action may be checked by the action of antim. tart., which is similar to that of bleeding; and also in acute rheumatism, in which disease, unless there be pericarditis, he believed bleeding to be unnecessary and injurious; rheumatism may be cured by lemon juice, which diminishes the inflammatory crasis of the blood.

Dr. Camps followed Dr. Semple, and agreed with the greater part of his remarks. He criticised Mr. Langley's practice in treating a young child, twenty months old, by the application of twenty leeches to the head, followed up soon after by the abstraction of eleven ounces of blood by cupping. He thought that a very great quantity indeed to take from so young a child, and fancied that the little patient got well in spite of, and not in consequence of, the treatment. Nothing would induce him (Dr. Camps) to order the abstraction of so large a quantity of blood from so young a patient. He entered his protest against the doctrine laid down by Mr. Langley, and said he supposed the paper had not been submitted to a Committee before reading it to the Society. (Oh! Oh!)

Mr. Dendy took the part of a moderator; he thought both parties were right, and both wrong. There could be no doubt that all Mr. Langley's cases required the copious blood-letting he had practised; but he differed with Mr. Langley in the assertion, that the abstraction of blood, as hitherto employed, failed from not being carried far enough, and that he (Mr. Langley) has succeeded with it from the boldness with which he had recourse to it. He (Mr. Dendy) considered that blood-letting was chiefly useful by relieving the system from a load, and rendering it susceptible of the influence of other remedies. He thought it very dangerous to put forth such abstract principles as the author of the paper advocated.

Dr. Crisp followed, and defended Mr. Langley in a great measure. His views resembled those he had himself long advocated. He believed the superiority of blood-letting over antim. tart. was very marked. Medical men talk of curing without blood-letting; but are the patients cured? Is the inflamed organ as sound as before; or as it would have been if early depletion had been had recourse to? He thought the effects of non-bleeding were not duly appreciated. He had seen its fatal effects frequently in dispensary practice. He agreed with Mr. Langley, that he had never seen dropsy caused by excessive blood-letting; and he referred to the immense hæmorrhage at times attendant on miscarriages and abortions, without dropsy occurring. On the other hand, he had seen dropsy cured by bleeding, practised for the removal of accidental pneumonia or pleurisy. He thought well of Mr. Langley's general principles, but he could not go so far with them as he did.

Dr. Lankester regarded the debate as a contest between the old and the young practitioner. The general effects of blood-letting should be understood; it might do good by the removal of a bad article, thus giving the system the opportunity to make a better. At other times, again, by causing syncope, and again by forwarding the absorption of certain drugs. Local bleeding acts often by counteraction. Dr. Semple had been misunderstood; he was not opposed to bleeding altogether. On the contrary, he thought it was sometimes requisite. Mr. Langley advocated the old practice of bleeding in all cases,—of bleeding for the sake of bleeding. He (Dr. Lankester) had seen a great deal of this,—a great deal too much of it. Statistics in Louis' cases showed no great benefit from bleeding; but, again, in Dr. John Taylor's admirable papers on pericarditis, they showed what would not have been expected, that calomel was of but little use, and that bleeding was of great service,—a fact of immense importance, as practitioners of late seemed to rely almost wholly on calomel, and to neglect bleeding altogether. He then commented on the fact, that no ill effects from these extensive bleedings were mentioned in the paper, although such must have been met with, and he (Dr. Lankester) spoke of two cases of bleeding in children, in one of which the patient died during the operation, and the other from fatal syncope. Dr. Lankester concluded, by asserting, that any man who utterly condemned bloodletting, should not be allowed to practice his profession.

Other speakers followed, and at last this debate, which was protracted much beyond the usual hour, closed.

ENTOMOLOGICAL SOCIETY.

REMARKS ON THE PSYCHIDÆ.

By PROFESSOR SIEBOLD.

[We are indebted to Mr. Jordan, of Queen's College, Birmingham, for the following report of Professor Siebold's views, translated by Mr. Stainton, on the non-sexual generation long known to take place in the Psychidæ, and so interesting to those who delight in comparative physiology.—Ed.]

The Psychidæ form a curious class of Lepidopterous insects, distinguished by their apterous females, and also by the larvæ building for themselves cases in some measure similar to those constructed by the common caddisworms, or Phryganeæ. They may be divided broadly into three genera; viz., Psyche, Fumea, and Talæporia, of all of which we have British examples. It has been long known to English entomologists, that the females of these insects often laid fertile eggs without any sexual impregnation having taken place. No explanation of this was, however, offered. During the autumn of last year, a well-attested example of this kind was laid before the Entomological Society,—a female of Talæporia inconspicuella, which had been bred, and to which no male could have obtained access, laid fertile eggs, from which larvæ were produced. Siebold has also made a very extensive series of observations on an allied species, the Talæporia lichenella of the continent; from the larvæ he has never reared anything except these wingless females. He therefore supposes that the Talæporiæ are subject to the same alternations of generation as the Aphides. "I am now," he says, "in a condition to announce with certainty that the Talæporia lichenella of Zeller is subject to a change of generation, or rather that Talæporia lichenella is a sexless nurse, since the larvæ of this case bearer produce nothing but females, and always only again females, which, *sine concubitu*, lay eggs, from which larvæ afterwards actually escape. Apparently these wingless individuals of Talæporiæ lichenella with ovipositors, do not correspond to females, but to sexless nurses of a species of Talæporia, subject to alternation of generation. How many generations of these nurses follow one another, till at last a sexual generation occurs, has not been ascertained." From his observation, he concludes that this law is not constant throughout the group, but holds good only in the genus Talæporia, and perhaps in the curious species of Psyche, named by him Psyche helix. There is still much that is vague in this account, and as yet the explanation of the facts seems rather based on analogy and theory than dissection or positive experiment; nor indeed is the analogy perfect. There can be no exact parallel drawn between the viviparous nurses of the Aphides, and the oviparous females of the Psychidæ. In the Aphides, we adopt the explanation given by Dr. Carpenter, and regard the phenomenon as not an alternation of generation, but "an alternation between the products of the generative act, and the products of gemmation." If, however, these female Psychidæ lay eggs, which produce larvæ, we hardly see how it can be thus explained in their case. The investigation of this subject seems, therefore, well worthy the attention of physiologists, nor would it be attended with much difficulty, as the larvæ of Talæporia inconspicuella are not rare near London, and they may be met with rather frequently among the lichens which cover the trunks of some of the oaks in Hyde-park.

CHEMICAL SOCIETY.

Dr. Lyon Playfair, F.R.S., Vice-President, in the Chair.

HIPPURIC ACID.

Mr. Riley, assistant in the laboratory of the Museum of Economic Geology, read a very interesting paper on Hippuric Acid. Mr. Riley has succeeded in obtaining this acid in considerable quantities, by the simple addition of hydrochloric acid to the fresh urine of the cow, without previous evaporation. Crystals of hippuric acid are deposited, which, when treated with animal charcoal, and recrystallized, are obtained quite pure. Mr. Riley has, by this method, obtained three ounces of hippuric acid from a gallon of urine. From the ready transformation of this acid into benzoic acid, it is not unlikely that this process of obtaining hippuric acid may lead to some results of commercial importance, as benzoic acid is obtainable from this source at a less cost than from gum benzoin. Mr. Riley has found that urine of cows at pasture yields a much larger quantity of hippuric acid than that furnished by cows at the stall, fed on hay and oil-cake; arising, no doubt, from the transformation of the fumarine, a constituent principle in several grasses, into hippuric acid in the animal economy.

POPULINE.

The Secretary read a communication from M. Piria, relative to his researches on populine, the active principle of the Populus tremula (aspen). It would appear from these researches, that populine is a conjugated acid, containing benzoin and salicine. On boiling populine with baryta water for a few minutes, the resulting products are benzoate of baryta and salicine. The salicine thus obtained is precisely identical in composition with that obtained from the bark of the willow. M. Piria is now endeavouring to effect the transformation of salicine into populine, through the agency of chloride of benzole; in which attempt he has as yet been unsuccessful, owing to the action exercised by the evolved hydrochloric acid on the product as soon as formed.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 6th inst.:—

Armstrong, Wyndham Fitzgerald, Adare, Limerick.
Elliott, Robert, Tyrone.
Ellis, Henry, Bangor, Carnarvonshire.
French, John Gabriel, Jewin-street, Aldersgate-street.
Gramshaw, Henry, Gravesend.
Hewer, John Henry, Chobham, Surrey.
Jackson, Peter Nevill, Beverley, Yorkshire.
Pery, Richard, Dublin.
Porter, Ridley, Bishopsgate-street.
Sconce, Clement, Bath.
Twining, David, Winslaw, Bucks.

At the same meeting of the Court, Mr. Daniel Wills Stephens passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date May 29, 1846. Mr. William Henry Baxter also passed his examination for Naval Assistant.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 5, 1852:—

Ball, Alfred.
Chibnall, Charles, London.
Kebbell, Mark, Brighton.
Lacey, John.
Luxton, William Tideoald, Winkligh, Devon.
Mountford, John Bidlake, Exeter.

Medical Appointments and Vacancies.—There is a vacancy in the office of physician to the Farringdon General Dispensary and Lying-in Charity. By the rules the physicians must be fellows or licentiates of the London College, not practising any other branch of the Profession. Testimonials to be sent to the Honorary Secretary. A house-surgeon and apothecary is wanted at the Whitehaven and West Cumberland Infirmary: salary 100*l.* a-year, with apartments, rent and taxes free, attendance, coals, and candles. Candidates must possess the double qualification, and preference given to bachelors. The gentleman elected will be required to enter into an engagement for three years at least. Date of election 9th of March next, at noon: date of duty commencing, 1st of April. At the Halifax Infirmary and Dispensary the same office is vacant: salary 60*l.* a-year, with board, furnished apartments, and attendance. Testimonials to be sent in by the candidates, who must be legally qualified, on or before the 1st March, to the senior physician and the medical staff, by whom the appointment is to be made. Election on the 10th March, at noon. A medical officer is needed for the Ledbury Poor-law Union, district No 3: election on the 2nd March. The district comprises thirteen parishes, area in acres 20,925; population 4537; salary 90*l.* a-year. The guardians provide medicines and appliances: no extra fees. The gentleman elected must reside in Ledbury: testimonials, etc., to be sent in on or before the 1st: personal attendance at the Board on election-day requisite. It is not stated, whether a dispenser and a horse or two are provided, as well as medicines and other appliances. The latter (the horse or two) will be wanted, to traverse an area of upwards of 20,000 acres, and perhaps horse flesh and horse food, with other attendant expenses, such as groom, and board and clothing of ditto, turnpikes, etc., will swallow up all or nearly all the pay. The Union vacancies are increasing. The guardians of the Peterborough Union announce, that on 21st February they intend appointing a duly qualified medical officer to the Stilton district, comprising the parishes of Caldecot, Denton, Folksworth, Glatton, Haddon, Holme, Morborne, Stilton, Washingley, and Yaxley, all in Huntingdonshire. The pay is partly by salary, and partly by case, amount not stated; extra fees for vaccination, operations, and midwifery. Appointment for one year: re-appointment at the pleasure of the guardians. Applications on or before the 20th: personal attendance requisite on election-day. The officer must reside within the district. The Staines Union authorities also require a medical officer for the parishes of Staines and Stanwell, and the Staines Union house, at a salary of 90*l.* a year. Either of the three may be taken separately at 30*l.* a year, or a parish and the house at 60*l.* Extent in area and population not mentioned. Election on the 17th inst., at 11 a.m., at the Union house, when the personal attendance of the candidates is required. Mr. N. Puddicombe, of Silverton, has been appointed medical officer of the parishes of Silverton and Bickleigh, in the room of Mr. G. D. Puddicombe, deceased. The appointment is only till Lady-day next. Dr. Brinton, of King's College, has been appointed physician, Mr. Weedon Cooke, assistant surgeon, and Mr. Carr Jackson, medical officer for the diseases of children, to the Royal Free Hospital, Gray's-inn-lane; the two latter have been house surgeons of the hospital. Mr. Wordsworth has been elected assistant-surgeon to the Moorfields, or Royal London Ophthalmic Hospital. Dr. Willoughby Wade has been appointed resident physician and tutor to the General Hospital, Birmingham, in place of Dr. T. P. Heslop, resigned. Dr. Wade is a Bachelor of Arts and of Medicine of Trinity College, Dublin, and M.R.C.S.L.

Military Appointments.—3rd Light Dragoons—Assistant-Surgeon O'Connor D'Arcey, M.D., from the 87th Foot, to be Assistant-Surgeon, vice Franklin, promoted in the 86th Foot. 86th Foot—Assistant-Surgeon Henry Franklin, from the 3rd Light Dragoons, to be Surgeon, vice Thom promoted on the Staff. 87th Foot—Assistant-Staff-Surgeon John Lyster Jameson, to be Assistant-Surgeon, vice D'Arcey, appointed to the 3rd Light Dragoons. Hospital Staff—Surgeon Alexander Thom, from the 86th Foot, to be Staff-Surgeon of the first class, vice R. Hope Alston Hunter, who retires upon half-pay; Assistant-Staff-Surgeon R. J. Hennell, to be Staff-Surgeon, second class, vice Gray, deceased.

Naval Appointments.—Surgeon Edward Nolloth, M.D., (1845) to be surgeon-superintendent of the Fairlie, convict-ship; Assistant-Surgeon Francis C. Sibbald, M.D. (1846), to the Tyne store-ship at Woolwich; Assistant Surgeon Samuel (1846), to the Vesuvius, steam-sloop, at Devonport: James Whicher (1846) from the Victory, flag-ship, at Portsmonth, to Greenwich Hospital, vice Domville, promoted; Richard King (1846) to the Victory, flag ship at Portsmouth, vice Whicher.

Naval Promotion.—Assistant-Surgeon, Wm. T. Domville, M.D. (1842), serving at Greenwich Hospital, to the rank of surgeon.

Obituary.—On the 30th ult., at Bicester, Oxfordshire, after a few days' illness, Edward Hugh Thorpe, Esq., surgeon, aged 38.

Death of Sir Alexander Mackenzie Downie, M.D.—This gentleman died, after three days' illness, on the 3rd inst., at Frankfort-on-the-Maine, aged 41 years. He was younger son of the late Rev. Alexander Downie, D.D., (minister of Lochalsh, in the county of Ross,) by the daughter of Charles Mackinnon, Esq., and was lineally descended from the Rev. A. D'Aunay, who retired to Scotland after the revocation of the Edict of Nantes, and from Flora Macdonald, whose heroic attachment to Prince

Charles Edward history has made us all so familiar with. The deceased received the honour of knighthood from Her Majesty for his attention as physician to Her late Royal Highness the Princess Elizabeth. Landgravine of Hesse Homburg; and during the same year (1840) was appointed Physician in Ordinary to His late Royal Highness the Duke of Cambridge; and in 1846, Physician Extraordinary in the household of Her Royal Highness the Duchess of Kent. In 1840, Sir Alexander married the eldest daughter of the late Charles Hare, Esq., of Bristol, now surviving, by whom he has left four children. Of late years the deceased has acted as Physician to the British Legation at Frankfort; by the members of which, and other diplomatic bodies there, as well as the authorities of the city, and numerous residents and friends, his remains were attended to the grave. Many of our countrymen, whom either health or pleasure brought to Frankfort, will sincerely mourn the loss of this much lamented gentleman, whose kindness and attention to them in a foreign land were proverbial; while his hospitality, vast fund of information, and great powers of conversation, will long be remembered by all who had the privilege of knowing him. The deceased was author of various works on the mineral waters of Germany; and few, indeed, of his patients who consulted him regarding them, left him without receiving relief from his professional skill, which was of the highest order. Our northern contemporaries have, within the last few days only, recorded, with much feeling, the death of his elder brother, the Rev. Charles Downie, minister of Coutin, Ross-shire, the sudden intelligence of which greatly affected Sir Alexander, and, perhaps, in a measure, caused his illness to be fatal. Both brothers will be very long remembered with much affection by a numerous circle of attached relatives and friends.

Royal Medical and Chirurgical Society, February 10, 1852.—Charles Bland Radcliffe, M.D., and Charles Ridley, Esq., were elected Fellows. John Hall Davis, M.D., Robert James Hale, M.D., James Merryweather, Esq, and Walter Hayle Walshe, M.D., were proposed as Fellows. At the next meeting, February 24, the following gentlemen will be ballotted for:—James Luke. Esq., George Pilcher, Esq., and Christopher W. T. Robinson, Esq.

Medical Reform.—A meeting of the Shropshire District Branch of the Provincial Medical and Surgical Association was held in Shrewsbury, on Monday, Feb. 2, the following gentlemen being present:—P. Cartwright, Esq, Oswestry; W. P. Brookes, Esq., Much Wenlock; Richard Thursfield, Esq., Broseley; Richard Wilding, Esq., Church Stretton; S. G. Bakewell, Esq., M.D, All Stretton; Richard Peirce, Esq., Madeley; W. J. Clement, Esq.; T. J. Drury, Esq, M.D.; Henry Johnson, Esq., M.D.; H. Keate, Esq.; J. R. Humphreys, Esq.; T. Pidduck, Esq.; Samuel Wood, Esq.; and J. N. Heathcote, Esq., all of Shrewsbury. Mr. Cartwright moved, and Mr. Wilding seconded the following resolution:—"That this meeting of the Shropshire Branch of the Provincial Medical and Surgical Association, impressed with a deep conviction that it is essential to the best interests of the Profession and the public that the question of Medical Reform be brought to issue, feel much gratification in the assurance that there is a fair chance of so desirable a result, in consequence of the Bill being brought forward in the name and by the authority of the Provincial Medical and Surgical Association. The members of the Shropshire Branch beg to express their hearty concurrence in the principle of the Bill, and in the just and equitable constitution of the Medical Council. They approve most highly of a Provident Fund, to which every medical man will hereafter have a claim, and which they regard as the best guarantee against that overwhelming affliction which is too often the lot of many who have to labour hard in a toilsome and ill-requited Profession. Finally, regarding the draft bill as only provisional, the members of the Shropshire Branch beg to express an earnest wish that the Council will mature the measure, and carry it on to completion, satsfied that the Profession at large will hail with gratitude the settlement of those differences and perplexities which have so long troubled its tranquillity." Mr. Brookes moved, and Mr. Keate seconded, as an amendment, proposals for the reform of the Apothecaries' Company:—"First—A new Act under the title of the Royal College of Medical Practitioners of England and Wales. Second—The governing body to consist of twenty-four councillors, to be chosen from among the electors of the said College; one-fourth to go out of office either annually or triennially. The voting for the Council to be by balloting papers, transmitted by post. Third—The Council to decide on the preliminary and professional education of candidates, and to appoint an examining board to examine in all branches of medical education, midwifery and surgery excepted, in which latter branches the candidate, before obtaining his licence to practise, shall by examined by the Royal College of Surgeons, of which he shall be a member. Fourth—The electors for the Council of the said College of Medical Practitioners to consist—1st., of all medical and surgical practitioners, not possessing diplomas, but legally qualified by having been in practice prior to 1815. 2nd. All licentiates of the Apothecaries' Company. 3rd. All who, not possessing a licence from the Apothecaries' Company, are members only of the College of Surgeons. 4th. All persons hereafter licensed to practice medicine by the said College of Medical Practitioners, and Surgery, and Midwifery, by the College of Surgeons, and who shall be registered as Surgeons and Medical Practitioners. Fifth.—The present governing body of the Apothecaries' Society to form part of the first Council, and the present examiners to remain in office as long as they would under the existing Act of the Apothecaries Society; but their number to be increased, if deemed necessary, by the Council. Note.—The surgeon or general practitioner will thus have a voice in the management of his own medical college, and be enabled to secure for his own class a high standard of education, preliminary and professional. He will also be connected, as at present, by membership, with the College of Surgeons, of which institution he may also become an elector by taking the fellowship, for which honour every candidate for the licence to practise under the title of surgeon, should be required to prepare himself in his education. Lastly.—A Council of Health and Medical Education to be formed of members of the Councils of the three Colleges, and of persons appointed by the Government, to be presided over by a Minister of Health, or by the Secretary of State for the Home Department. All plans for medical and surgical education to be submitted to such Council of Health and Medical Education, for their veto, if deemed by them of too low a standard, but not otherwise. Such Council not to be empowered to appoint any examining board."

University of Oxford.—Dr. Acland, Dr. Lee's Reader in Anatomy, commenced a course of lectures on the 10th inst., at 8 p.m., in the Anatomical Museum of Christ Church.

Medical Benevolent College.—We have pleasure in announcing, that the first sermon in aid of the funds of the College will be preached at St. Mary's Church, West Brompton, on Sunday next, by the Rev. J. Swale, A.M., the incumbent; on which occasion we trust that the many public services gratuitously rendered daily by the Profession will be forcibly adverted to by the rev. gentleman. It is gratifying, also, to observe, that the Bishop of Ripon, and other clergymen, have kindly offered to preach in behalf of the Society, in the course of the next few months; from which source alone we hope that the funds of the College will be considerably augmented. The cordial co-operation thus evinced on the part of the clergy, who are so well able to appreciate the services rendered to the poor by medical men, is a pleasing proof that the Profession is fully justified in appealing to the public to enable it to effect the important object contemplated.

The Hospital for Sick Children, in Great Ormond-street, will be open on and after the 16th inst., the Board of Health having cordially approved its arrangements. We have already published the list of its medical officers.

Charity for Hospital Purposes.—Mrs. Wolridge's proposal to give 50 guineas to the Cancer Hospital, if nineteen additional sums of equal amount be raised by the end of March, has been so far successful that half the sum required has been obtained. Her plan, by no means a novel one for stimulating charity, has been followed as regards the new Hospital for Diseases of the Chest, in Victoria-park, three friends of that proposed establishment having made an apparently much more generous offer. They propose to give between them 750*l.* towards a fund for completing and furnishing the new hospital, providing that a fourth can be induced to contribute another sum of 250*l.*, and that 4000*l.* more be obtained in smaller sums for the same purpose. We have called this an apparently more generous offer, and only apparently; because the contingencies are greater, while the sums to be subscribed are also much larger. A legacy of 105*l.* has been bequeathed to the Royal Dispensary for Diseases of the Ear by the late Mr. Roberts.

The Hunterian Oration.—Mr. Luke, of the London Hospital, will this day (Saturday) deliver the annual oration in memory of John Hunter.

The Income-tax.—Mr. Hume has given notice of his intention to move the re-appointment of a Committee on the Property and Income-tax. We sincerely trust that the interests of the medical profession will be looked to in this matter more than they have hitherto been.

A Petition has been presented to the House of Commons by Mr. G. Hamilton, from the President and Fellows of the King's and Queen's College of Physicians, Dublin, praying the House to

reconsider the case of the Dublin hospitals, which receive annually a certain sum, varying to each establishment, from the public funds, the amount of which it was determined last year, to diminish gradually, with a view to its final extinction. It was the wrong end of the wedge; true economy does not consist in stopping charity, or in arresting the progress of science. More money would be saved by lopping off sinecures and unmerited pensions.

THE meetings of the Ashmolean (Natural History) Society, Oxford, will be held, during the present term, on February 9 and 23, and March 8.

DEATHS *in the Metropolis for the week ending Saturday, February 7*, 1852.

CAUSES OF DEATH.	FEB. 7.				Sum of Ten Weeks.
	0	15	60	All Ages.	
ALL CAUSES	437	346	223	1016	10603
SPECIFIED CAUSES	435	345	222	1002	10549
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	150	39	12	201	1998
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	2	18	20	40	549
3. Tubercular Diseases	62	139	5	206	1843
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	56	28	33	117	1276
5. Diseases of the Heart and Blood-vessels	2	24	20	46	339
6. Diseases of the Lungs and of the other Organs of Respiration ...	74	44	53	171	2172
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	19	15	19	53	633
8. Diseases of the Kidneys, &c. ...	...	9	5	14	83
9. Childbirth, Diseases of the Uterus	...	8	...	8	96
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	3	2	6	73
11. Diseases of the Skin, Cellular Tissue, &c.	...	...	2	2	13
12. Malformations	5	...	...	5	39
13. Premature Birth and Debility ...	31	2	...	33	218
14. Atrophy	15	...	...	15	175
15. Age	...	...	42	42	661
16. Sudden	5	3	5	13	104
17. Violence, Privation, Cold, and Intemperance	13	13	4	30	277
CAUSES NOT SPECIFIED	2	1	1	14	54

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Allow me to correct an error in the report of the proceedings of the Medical Society of London, in your Number for Jan. 31. Dr. Jones "thought that the bile of infants was of a greener hue than in the adult." I said that I doubted the correctness of this opinion, as I had not unfrequently seen the bile of infants of a light gruelly appearance. But in the adult (as stated in the report) I have never seen it of this colour.

I am, &c.,

Parliament-street. EDWARDS CRISP, M.D.

MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your List of Scientific Meetings for the Week, prefixed to your Leading Articles, you announce the subject for discussion on each occasion, excepting one, and that one is the Royal Medical and Chirurgical Society.

Why should this be? The President always announces to the Fellows the papers to be read at the next meeting. Why may not the same information be communicated in the pages of your widely-circulated Journal?

I am anxious to see your Journal vie with its namesake, the great "Times" Journal, in the fulness of its information, as well as in the boldness and plain-spoken honesty of its Leading Articles.

I am, &c.

A FELLOW OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

[The reason is, that the Council of the Royal Medical and Chirurgical Society do not always ride when they saddle. Papers *should* be read as they stand upon the list, or are announced. But this is not the case; and our readers might be brought down to some dainty dish, and find themselves partaking of something less palatable.—ED.]

[To the Editor of the Medical Times and Gazette.]

SIR,—The evasion of the doctor's bill is by many considered rather a meritorious act, and a few wholesome examples are sometimes serviceable in making people honest; but to fail in any attempt in compelling payment is to raise up a host of enemies. Will you be kind enough, therefore, to give, in your Answers to Correspondents, your opinion on the following case:—A is member of the College of Surgeons and Apothecaries' Company, and in partnership with B, who has only a medical degree. Can an action be successfully prosecuted in the name of the firm (A being the senior member) against a person who has been attended only by B? Or is it necessary that A should have seen the case? This is a point of great nicety, and one, which, we believe, has not been yet tried.

I am, &c., ALPHA.

A Subscriber.—Write to us confidentially, and we will point out the how, the where, and the means.

Dr. John Davy, of Ambleside, is thanked.

We had not space in our present Number to insert Dr. Todd's Lecture on Typhoid Fever at length. Unwilling to divide it, we postpone its publication to our next Number.

Mr. V. Solomon's papers will be commenced next week.

Dr. Wood, of Bethlem.—We shall next week insert Dr. Wood's reply to Dr. Bucknill, and regret we cannot find room for it in our present Number.

X. (Ireland.)—Under the present system of election, such practices must be always expected. We know of only one way to obviate it; namely, by the appointment of a Committee of five, pledged to elect on the merits, and the merits only.

T. O. D.—The Bill is actually in operation at present: the Dublin appointments have been already made. As to when its provisions will be extended to any particular locality, must depend altogether on the dictum of the Commissioners; but there is no reason to anticipate any serious delay beyond what is absolutely required to go into the details of the numerous cases coming under the operation of so extensive a measure.

T. A. (Ireland.)—Our Correspondent must send us the particulars as to extent of proposed district, population, &c. It is most monstrous to expect educated gentlemen to perform such arduous and responsible duties at salaries which would be rejected with contempt by a respectable merchant's clerk.

O. (Ireland.)—Make a bold statement to the Medical Commissioner: it is imperative on him to protect the honour and interests of his brethren. If you do not get redress let us know.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the answer to a Subscriber in last Saturday's "Medical Times and Gazette," some useful advice is given regarding emigration vessels, in which a reference is made to Lieutenant McLean as the agent, &c. I take occasion, therefore, to state, for your information in future, that Captain Lean, R.N., is the Government Emigration Officer for the Port of London; with whom I am associated as the Government Medical Inspector of Emigrants for this port.

I am, &c. J. G. SPARKE, M.D.

Finsbury-place South.

Mr. W. P. Brooke's (Much Wenlock) letter will appear in our next number. His proposal for a reformation of the Apothecaries' Company will be found in another column.

Dr. Goodman, of Manchester.—The paper forwarded having been read at a Medical Society, and distributed, we suppose, among the Author's acquaintance, is, considering its length, respectfully declined.

COMMUNICATIONS have been received from—

SCRUTATOR—On the NEW EQUITABLE ASSURANCE OFFICE; Dr. ORMEROD, of Brighton—On the PATHOLOGY of ONE FORM of ENCYSTED EMPYEMA; Dr. PARKES, of University College and Harley-street—1. On a CUTANEOUS ERUPTION, identical with the CHOLERA EXANTHEM, after DIARRHŒA. 2. DIARRHŒA and PSEUDO-CHOLERAIC SYMPTOMS; Mr. HAMILTON, of Plymouth—The SANITARY CONDITION of PLYMOUTH; Dr. TODD, of King's College and Spring-gardens; INQUISITOR—On the SPECULUM QUESTION; Mr. RAWLE, of the Minories—On WOUNDS of the SCALP; Dr. RIDGE, of Putney—On PROLONGED GESTATION; Mr. VERE IRVING, of Ampthill-square—On the JENNER MONUMENT; Mr. CURTIS, of Maryport—On WOUNDS of the SCALP; Mr. LANGLEY, of Albany-street, Regent's-park—On the UTILITY of COPIOUS BLOOD-LETTING in CONGESTION and INFLAMMATION; Messrs. GOULD and THURSTON, of Kingsland Crescent—The EFFECTS of STRAMONIUM; Mr. BROOKES, of Much Wenlock—LETTER to the MEDICAL and SURGICAL PRACTITIONERS of ENGLAND and WALES on the BILL for the UNIFORMITY of MEDICAL EDUCATION; Dr. R. HUTCHINSON POWELL, of Edward-street—On the SOUNDS of the HEART; Mr. LEE, of King's College Hospital and Dover-street—CASES of RECOVERY after FRACTURE of the BASE of the SKULL; Dr. RAMSBOTHAM, of New Broad-street, and Portman-square—On the FINAL CAUSE of MENSTRUATION; Dr. WOOD, of Bethlem Hospital—On the PLEA of INSANITY; Mr. REED, of St. Mary's Hospital—HOSPITAL REPORTS; Dr. ROONS, of Bloomsbury-street—On the FINAL CAUSE of MENSTRUATION; Mr. MOORE, of Queen's Hospital, Birmingham—On WOUNDS of the SCALP; Dr. R. TAYLOR, of Guilford-street, Russell-square—IRITIS in a CHILD of NINE MONTHS; M.D. LONDIN.—On DYSMENORRHŒA; Mr. BRODHURST, of the Royal Orthopædic Hospital and Brook-street—CASE of MALFORMATION of the GENITAL ORGANS in a FEMALE; E. W.—On the FINAL CAUSE of MENSTRUATION; Mr. SAUNDERS, of H.M. 47th Regiment—MEDICAL HISTORY of the 47th REGIMENT: FEVERS; Mr. GRIMSDALE, of Liverpool—MEDICAL SOCIETY REPORTS; SCRUTATOR—On Mr. SYME; Dr. SPARKE, of Finsbury-place South; Dr. PERKINS, of Brussels; Mr. WILDE, of Dublin; Dr. MORRIS, of Spalding; Dr. CRISP, of Parliament-street; Mr. DAVENPORT, of Hull; CHIRURGUS EDINENSIS; A SUBSCRIBER; Mr. MACKMURDO, of St. Thomas' Hospital and New Broad-street; A FELLOW OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; T. O. D.; Mr. JONES, of Peckham; Mr. MILTON, of Jewin-street; ALPHA; X; T. A.; O.; Dr. CANR, of Rusholme, near Manchester, (two papers received).

NEW AND IMPROVED EDITION OF THOMSON'S CONSPECTUS, WITH THE NEW PHARMACOPŒIAS INCORPORATED.

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Just published, by Renshaw, 356, Strand, Second Edition, price 1s.,

Gilbert on the Extraction of Teeth;

being a Work descriptive of a new and much less painful method of Operating, by means of Gilbert's Patent Fulcrum; the jaw cannot be fractured, or the gums lacerated; there is less danger of breaking the diseased tooth, and of hæmorrhage, &c.—Mr. Gilbert invites the Profession to inspect his invention, from 11 till 4, at 5, Suffolk-street, Pall-mall; or at the Manufacturer's, W. Matthews, 10, Portugal-street, Lincoln's-inn.

"We can confidently direct attention to it as a boon to the Profession and the public."—Lancet, Dec. 2.

"It allows of the extraction of teeth in the most scientific and easy manner; and, in performing certain other surgical operations, the chair will prove of inestimable value to the surgeon."—Medical Times, Feb. 10.

Just Published, 8vo, with Woodcuts, price 5s., Part XLII., of

The Cyclopædia of Anatomy and Physiology.

Edited by ROBERT B. TODD, M.D., F.R.S., Fellow of the Royal College of Physicians, Professor of Physiology and of General and Morbid Anatomy in King's College, London, and Physician to the King's College Hospital.

CONTENTS:—Varieties of Mankind, (concluded,) by Dr. Carpenter—Vein, by James Salter, Esq.—Venous System, by Dr. M'Dowel—Vesicula Prostatica, by Professor Leuckardt—Vesiculæ Seminales, by S. R. Pittard, Esq.—Vision, by W. White Cooper, Esq.—Vital Statistics, by Dr. Guy—Voice, by John Bishop, Esq.

*** The Next Part will be published in May, and will contain the remainder of the Article VOICE, the article WRIST JOINT, and the Index to the Fourth Volume of the Cyclopædia. The body of the Work will thus be completed. The Part will also contain the commencement of the Supplement, in which it is intended to supply those articles which were not ready to be published in their proper places. The first article in the Supplement will be OVUM, by Prof. Allen Thomson. It is expected that the Supplement will be completed in Three or Four Parts.

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Brown's Stamped Register of Medical Books,

&c., marked at greatly reduced prices, will be ready FEBRUARY 20, GRATIS and POST-FREE to any part of the World.

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that Mr. Barnard Holt's Improvement on M. PERREVE'S STRICTURE DILATOR is made SOLELY by Messrs. Philp and Whicker (late Savigny and Co.,) 67, St. James's-street.

To Medical Practitioners.—The GUARDIANS of the PETERBOROUGH UNION will, at their

Meeting, to be held on the 21st DAY of FEBRUARY next, ELECT a duly-qualified MEDICAL PRACTITIONER, to Attend and Supply with Medicines the Sick Poor of the Stilton District of the above Union, which comprises the Parishes of Caldecot, Denton, Folksworth, Glatton, Haddon, Holme, Morborne, Stilton, Washingley, and Yaxley, all in the county of Huntingdon. The payment (particulars of which may be obtained of the Clerk) has been partly by salary, and partly by case, together with the usual extra fees for vaccinations, operations, and cases of midwifery. The appointment will be made for one year, and the officer re-appointed annually at the discretion of the Guardians.—Applications and testimonials to be sent to the Clerk, on or before the 20th Day of February next, and the personal attendance of the candidates will be required on the day of election. The Medical Officer elected will be required to reside within the district.

(By order)

SAMUEL C. W. BUCKLE, Clerk to the Guardians.

Peterborough, January 31, 1852.

To Medical Practitioners.—Ledbury POOR-LAW UNION.

— The Board of Guardians will, on TUESDAY, the 2nd DAY of MARCH next, at Eleven o'Clock in the forenoon, proceed to APPOINT a MEDICAL OFFICER, qualified according to the regulations of the Poor-law Board, for the Medical District No. 3, which comprises thirteen parishes; area in acres, 20,925; population, 4,537; salary, £90 per annum.

The Guardians will provide medicines and appliances. No extra fees will be allowed. The candidate elected will be required to reside in the town of Ledbury, and attend in all things to the rules and orders of the Poor-law Board. Applications, with testimonials, to be addressed to me, on or before the 1st day of March next, and personal attendance at the Board on the day of election, with documents necessary for proving the qualifications.

The qualified medical gentlemen of Ledbury are officers of the Union.

By order,
J. HUGHES, Clerk

Ledbury, February 3, 1852.

Lincoln County Hospital. — A VACANCY

having occurred in the office of HOUSE SURGEON by the resignation of Mr. Thomas Sympson, Notice is hereby given, that at the General Quarterly Board, to be held at the Hospital, on THURSDAY, the 1st DAY of APRIL, 1852, the Governors will proceed to elect his successor, who must be a Member of the Royal College of Surgeons, a Licentiate of the Apothecaries' Company, and a Member of the Church of England; and he will be required to hold the appointment for three years at the least. Testimonials as to qualifications are to be forwarded to the Weekly Board before Monday, the 22nd day of March next. Further information and particulars may be had on application to

Lincoln, February 9, 1852. J. W. DANBY, Secretary.

Eastern Dispensary of Bath.—A RESIDENT MEDICAL OFFICER

is required, who must possess the diplomas of a Royal College of Surgeons and Society of Apothecaries.

The salary is £80 per annum, with furnished apartments, and an allowance of £30 for coals, candles, and servant. The election lies with the governors and subscribers entitled to vote, and is appointed to take place on the 18th day of March next.

Testimonials, post paid, and marked "Eastern Dispensary," to be forwarded on or before February 27th, to E. Turner Payne, Esq., Hon. Secretary, 5, Old King-street, Queen-square, Bath, who will afford any further information required.

Bath, February 3, 1852.

To the Benevolent of the Medical PROFESSION.

—One of the oldest members of the Royal College of Surgeons, upwards of sixty years of age, is at present in the greatest distress, arising from a long sickness (which has prevented him from following his Profession for some time), and the loss of his only means of support, through the bankruptcy of a relative, together with a large family. The case is one of real destitution. The Advertiser has tried many means to endeavour to obtain a small sum, to enable him to leave his present abode, and place his family in a situation to contribute to their mutual support; but all have failed, and he is now compelled to appeal to his Profession, as a last and only resource. He trusts this application will not be made in vain. Donations, however small, will be most gratefully received, and reference given, by Mr. Churchill, Medical Publisher.

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Allsopp's East India Pale and other BURTON ALES.

—The Public is respectfully informed, that the ALES of THIS SEASON'S BREWINGS are now ready for delivery, and may be obtained GENUINE, in Casks of Eighteen Gallons and upwards, either singly or in any quantity, at their respective Stores, as under, where also a list of the bottlers may be had. The Brewery, Burton-on-Trent; 61, King-William-street, City, London; Cook-street, Liverpool; High-street, Birmingham; the Exchange, Manchester; Royal Brewery, Dudley; 33, Virginia-street, Glasgow.

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Knee-Caps, Anklets, &c., stand unrivalled for their efficacy in all cases of Varicose Veins, Weakness, Sprains, &c. They are drawn on with the facility of an ordinary stocking, affording equal and permanent pressure in every part. They are perfectly porous, less expensive, and more durable than any stocking yet produced. Huxley and Co. particularly solicit the inspection of the Profession.

Directions for self-measurement forwarded, and the article sent by post. HUXLEY and CO., 5, VERE-STREET, CAVENDISH-SQUARE. "A Country Practitioner.—Huxley's Surgical Stockings—*We constantly use them, and find them thoroughly efficacious.*"—Vide Lancet. Notice to Correspondents.

James's Powder.—Physicians and

other Medical Practitioners having complained of the frequent use of Antimonial Powder, instead of the "Genuine James's Powder" prescribed, have represented to Messrs. Newbery, that the price of the powder has greatly led to this fraudulent practice, and has also greatly prevented the more general use of the powder. Messrs. Newbery have, therefore, yielded to the suggestions of the Profession, and have reduced the price; and, to secure the use of the genuine medicine, recommend that the same should be prescribed as prepared by Messrs. Newbery, thus—"Pulv. Jacobi Ver," (Newbery's.) The price for dispensing will henceforth be reduced from 21s. to 9s. an ounce. The genuine has the name "F. Newbery, 45, St. Paul's," engraved on the Government Stamp.

The Jenner Monument.—The following Gentlemen, feeling that no Monument worthy of his name and services has yet been raised to his memory, have formed themselves into a Committee for the purpose of ERECTING a COLOSSAL BRONZE STATUE of Dr. JENNER, by WILLIAM CALDER MARSHALL, R.A. elect, to be placed in a Public Situation in London:—

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HON. SECRETARY.
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HEALTHY SKIN—VIDE "MEDICAL TIMES," MARCH 15, 1851.

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ORIGINAL LECTURES.

CLINICAL LECTURE,

AT

King's College Hospital

By ROBERT B. TODD, M.D., F.R.S.,
Physician to the Hospital.

ON FEVER.

Gentlemen,—I wish to-day to call your attention to a case of typhus, or common continued fever, with enteric disease, also called typhoid fever, which we have had lately in Rose Ward, and which we have watched with great interest, and not a little anxiety, for some days past. The case ended fatally, and for this reason I am the more desirous not to let it pass without some observations upon it. And I shall take this opportunity of giving you this advice; never shrink from analysing and carefully thinking over the cases which prove fatal under your care, with a view to inquire, whether by a little more care you might not have been more precise in your diagnosis, and whether you might not have been more watchful in your treatment, or have adopted a more promising course. Such an inquiry, if faithfully pursued, involves an amount of self-examination which, in course of time, cannot but redound most beneficially to the character of the practitioner.

It is a doctrine supported by our best physicians and highest authorities, that you cannot cure a fever; that is, that you cannot cut it short; you can guide it through its several stages, you can support the patient's strength, uphold his vital powers, until the influence of the poison is worn out, and combat any accidental affections which may arise in the course of the treatment, such as diarrhœa, pneumonia, etc.; and by such careful management you may save the patient, by preventing him from dying by exhaustion, and you may shorten his convalescence considerably.

This is a doctrine to the truth of which I have for many years given my full assent, not only as regards typhus fever, but also with respect to other fevers,—those, for instance, connected with the exanthemata. And although many, from time to time, have professed by some heroic method, adopted very early, to cut the fever short, and thus to convert what would otherwise be a tedious and painful illness of three or four weeks, into a short attack of a few days, yet I have failed to convince myself, either by experience or reading, that any such important discovery has as yet been vouchsafed to us, as one calculated to destroy the venom of the typhus poison, and so check its ravages.

All the cases in which it has been said that typhus has been cut short, as by a very large bleeding at the outset, or by free vomiting, or by some other means, are fairly open to the strong suspicion, if not the charge, of erroneous diagnosis. It is plain, if you think on the subject but for a moment, that without a most exact diagnosis this question of the early curability of typhus cannot be settled. Now, those who have seen most of this and other maladies, know best how difficult, nay, how impossible, it often is in the first week or ten days, to predicate with certainty of this or that case, that it is typhus fever. And, therefore, if you deal candidly with yourselves and others, you must not affirm that you can cut short and cure typhus, unless you have the most unequivocal evidence that the cases in question have been examples of that disease.(a)

If these views be correct, you will perceive the necessity, when you come to treat a case of this nature, of not wasting time in trying this expedient and that medicine, but you will apply yourselves to provide for the due care and watching of your patient, and the careful administering to his wants and necessities. In this respect, the poor, who are inmates of our public hospitals, have often a great advantage over the patients we have to treat in private practice; for here we have trained attendants, always ready, experienced in the management of cases of this kind, and accustomed to obey orders. In private practice, we are too often obliged to trust to the timid and inexperienced nursing of relatives and friends, or perhaps of servants already overburdened with other duties; or, if we do succeed in overcoming prejudices, and in inducing the friends to procure the assistance of a nurse, it is too often the case, that she is accustomed only to act as a lying-in nurse, and has no experience in fever cases. I would gladly read for you here the remarks of Dr. Graves, one of the greatest living authorities on the subject of the pathology and treatment of fevers, on the choice of a nurse in cases of this kind; but I must content myself with referring you to the first volume of his valuable work on Clinical Medicine, where you will find them in the ninth lecture.

And now for the particulars of the case. The patient was a man named John Gavin, 32 years of age, a large bony man, of strong build. He lay in Rose Ward. He is a printer, and had just come from Edinburgh to look for work in London. His illness probably commenced in Edinburgh, and developed itself immediately on his arrival in London. It is often extremely difficult to fix precisely the day on which a fever began, partly from the imperfect recollection of patients, and partly because the symptoms often develop themselves so insidiously and gradually, that the patient cannot note exactly the time when he really began to be ill; he feels for many days languid and out of sorts, but is still able to get about, and, unless some such prominent symptom as rigor has occurred, it is impossible to name one day more than another on which the fever began. Now, what we gather is this, that on or about the 9th, as he was leaving Edinburgh, he caught cold, of which he has no other evidence than the existence of great languor and weakness, with a strong sense of fatigue upon the slightest exertion. On his arrival in London, he found himself quite unequal to the task of looking out for work, and unable to follow his business if he had succeeded in securing employment.

All this looks very much as if he had caught the infection in Edinburgh, where, we know, fever is always more or less rife among the lower orders; its period of incubation being the day or two before he left that city, and the first few days after his arrival in London. During the first week of his arrival in town the sense of languor increased, and he felt very ill. On the 16th of January, 1851, sore throat came on, and he was attacked with several severe rigors, succeeded, on the 17th, by increased debility, vomiting, headache, and tinnitus aurium. On the 18th these symptoms had increased in severity, and his friends stated, that he became stupid, and appeared as if drunk, and at times he wandered a little. It was, then, on the 16th that the more decided symptoms of fever had developed themselves, although we cannot doubt that the poison had already begun to work in his system at least seven or eight days before that date.

He was admitted into the hospital on the evening of the 19th of January. On the 20th, the following report of his condition that day was entered in the case-book:—"The patient is very thin and weak; has a dull, vacant look; is delirious, incoherent, and it is not without great difficulty that answers to questions can be extracted from him; he is, however, very quiet, and lies chiefly on his back; respiration hurried; crepitation audible all over the posterior surface of both lungs, especially at their bases; the tongue is dry, but not coated; slight sordes on the lips and teeth; the abdomen slightly prominent and tympanitic; has had one loose motion in the night; no spots are observable; pulse 130, very compressible; respirations 44. He was ordered six ounces of brandy and a pint of beef-tea daily, and five grains of the sesqui-carbonate of ammonia, with half a drachm of chloric ether, in an ounce and a half of water, every six hours, and turpentine stupes to be applied freely to the back."

On the 21st, his symptoms had not changed, and the pulse was 128; respirations 40.

This description portrays very accurately the condition and the symptoms of a patient labouring under the most common form of continued fever now met with in London and our other great towns. On the 21st, reckoning from the date of the occurrence of rigors, the 16th must have been, at the earliest, in the fifth day of the fever,—it might be the seventh or eighth. This form of fever, which some French

(a) Since this lecture was given, Dr. Dundas, of Liverpool, has put forth the statement, that typhus may be cut short and cured by large doses of sulphate of quinine,—by as much as ten grains, administered every two hours. Dr. Dundas accompanies this statement with the narratives of several very striking cases, the results of which are so important, as in my judgment to commend his views to the attention and careful examination of every practical man. My own experience of his mode of treatment is not as yet sufficiently extensive to warrant an expression of opinion either *pro* or *con*. I must avow, however, a strong scepticism as to its probable efficacy in cutting the fever short. (Feb., 1852.)

and American physicians, and, more recently, some in our own country, seek to distinguish from typhus by the name *typhoid*, or by what I think, in some degree, a preferable name, *enteric*, is especially characterised by a remarkable tendency to a congested state of the bronchial passages and lungs,—a symptom which was well marked in our patient; and also by a strong disposition to irritation and inflammation, and subsequent ulceration of Peyer's patches, and even of the solitary glands in the small intestine. On account of this latter symptom, it is designated by German physicians, *typhus abdominales*.

There is yet another sign in this form of fever very common, although, perhaps, not quite constant, namely, the occurrence of peculiar spots or *maculæ*,—circular, rose-coloured spots, varying in diameter from a line to a line and a half, sometimes existing so thickly all over the body, that I have, at the first glance, fancied I have had a case of measles before me, and sometimes so few in number, that they can with difficulty be detected. They generally occur on the abdomen, chest, and back; rarely upon the extremities, and seldom if ever on the face. These spots are very slightly elevated, and disappear under the pressure of the finger. They do not generally occur before the sixth day; but, in our patient, they did not appear throughout his illness, or, if they did, they lasted but a short time, and so escaped our notice. He had, what is very common in these patients, a dusky hue of skin, with here and there minute specks, looking like half-finished flea-bites—a state evidently denoting feebleness of the capillary circulation of the skin. It is very possible that such a macula may have appeared and disappeared without attracting notice. They come in successive crops, each of which lasts but a short time, to be followed by another crop equally evanescent.

In a former lecture, in which I had occasion to refer to this subject, I pointed out to you the distinction between these maculæ and petechiæ; the former being a true eruption, the latter minute spots of extravasation. The former characteristic of this form of fever; the latter common to it, with other fevers and diseases of debility. I may here mention another condition of skin, which you will have frequent opportunities of seeing in fevers of this class. I mean minute vesicles, scattered in profusion over the skin on the chest, neck, &c.; these have been called *miliaria* or *sudamina*. I prefer the latter name, because it indicates the connexion of the eruption with that which I believe is their invariable antecedent, either locally or generally; namely, a sweating state of skin. Hence, these sudamina are not to be regarded as in any degree characteristic of this fever; for you will find them in all diseases in which sweating is apt to occur; they are very common in rheumatic fever, and in phthisis. I may add, that they do not require a general sweating for their development. A local sweating, such as may occur in a fissure between folds of the skin, would cause them to appear there.

I have told you, that the description which I read to you from the notes afforded a very good account of the state in which patients are at this period of the fever; that is, not earlier than the 5th day. Now, from this time, the symptoms continue of much the same character, with more or less of exacerbation till the 17th or 18th, or to the 21st or even 28th day: the most important symptoms being those referrible to the nervous system—coma or delirium; to the lungs—congestion, or even pneumonia and pleurisy, which are less frequent; and to the bowels, the diarrhœa.

When a case is about to terminate favourably, these symptoms gradually give way; the pulse exhibits no tendency to quicken, but rather to fall in frequency; the bowel affection appears easily controllable; the tongue begins to clear at the tip and edges; the patient becomes less stupid; comatose or delirious state diminishes; the pulse improves in quality, and the general powers of the patient experience a gradual but manifest change for the better. These changes commence generally in or about the third week.

But, if the case is not about to end favourably, we shall find an aggravation of some of these symptoms about this period. The pulse will increase in frequency, and its power will be much diminished; the delirium and other head symptoms will become more alarming, or the symptoms referrible to the lungs may become more severe, the breathing more rapid and feeble; the bronchial tubes may become plugged up with mucus, which the patient has not sufficient power to expel, and, in consequence, death may result from asphyxia; or he may be run down by the constancy or profuseness of the diarrhœa, and perhaps by hæmorrhage from the bowels.

Now let us see what was the further course of the symptoms in John Gavin's case.

On the 23rd of January he had in some degree recovered the exhaustion caused by his removal to the hospital. His pulse had fallen to 112, but the respirations continued at 48. He was purged four times in the day; the chest signs remained the same.

An enema of starch and opium was ordered at night to counteract the diarrhœa, and his brandy, ammonia, and beef-tea were continued as before. The motions became less frequent, and he remained without any change till the 27th.

On this day we found the bowels with a tendency to be loose again; three motions in the day; abdomen tympanitic; pulse 120; and respirations 52. Many of you will remember that I pointed out to you on this occasion a good mode of estimating the real power of the pulse in fever and other asthenic states, namely, by causing the patient to sit up in bed, and comparing the condition of the pulse in this semi-erect posture with its state in the horizontal position. It was not accelerated by the change from the horizontal position, but its strength and volume became most strikingly diminished; it became very small, and much more compressible, but immediately he resumed the horizontal position, it recovered itself.

There cannot, I apprehend, be a more palpable or unequivocal sign of an enfeebled circulation than this marked deterioration in the quality of the pulse on the patient's assuming the semi-erect from the horizontal posture. It indicates very clearly how dangerous it is to move patients in fever or other low diseases, or to allow them to move themselves, and how necessary for them it is that they should be constantly attended upon, that every, even the slightest, exertion on their parts should be prevented as much as possible.

It was now evident, that what we had chiefly to deal with was the extreme debility and the looseness of the bowels. This state of debility was the more fearful, inasmuch as it had come on, notwithstanding the free use of stimulants, since the 21st, for during that time he had been taking brandy at the rate of half an ounce every hour. I now doubled the quantity of brandy, and ordered the ammonia and chloric ether to be taken in an ounce and a half of infusion of rhatany every fourth hour.

For the two days (28th and 29th) following this increase of the stimulants, he continued much in *statu quo*,—the pulse 120; respirations 50; the purging diminished, so that he had only one stool in twenty-four hours. The rhonchus in the chest had increased, however, and the heart's sounds were very feeble, so that I felt it needful to increase the stimulant to five drachms every half-hour, or thirty ounces in the day.

On the 30th there was some improvement; he was more conscious, the breathing was more free, although still rapid (50); the rhonchus somewhat less, but the pulse was still 120; he had only one stool, and the belly was soft.

On the 31st, a still more sensible improvement had taken place. He was much more conscious; the rhonchus was less; vesicular breathing became much more distinctly audible in the lungs, the pulse had fallen to 112, and beat at this rate in the semi-erect as well as in the horizontal posture, although in the former it became reduced in power; the respirations were 46, and the heart's action stronger. No movement of the bowels.

On the following day, the 1st of February, the pulse was down to 100; respirations 45. The tongue was evidently cleaning; the heart's action was stronger; he coughed a good deal, and was rather drowsy. One loose stool.

On the 2nd matters were much the same; pulse 100.

On the 3rd, a much more decided improvement had taken place than had yet been observed. The pulse was only 84, and the respirations 38; he was more conscious; the rhonchus was less, and he breathed more freely; the tongue was clean, the abdomen soft, and the bowels quiet.

So far, then, we were in excellent spirits respecting our patient. All the most important symptoms had improved under the high degree of stimulation to which he was subjected; and of these improvements, none was more important than the reduction of the pulse in frequency at the same time that it acquired more power. The least improvement was found in his consciousness; although he took

more notice than before, and was less deaf, and answered questions more readily, he was still very heavy and stupid.

The continuance of this state of stupor led me, on the 3rd, to reduce the quantity of his stimulants by six ounces, so that he now took an ounce every hour instead of ten drachms. The chloric ether was omitted. From this time, I regret to say, "a downward tendency" (to borrow a mercantile phrase) became evident; the crepitation in the lungs increased, and he began to expectorate a large quantity of thick purulent fluid; his stupor did not diminish; and the pulse and respirations became each day more rapid than the previous one.

On the 4th, the pulse was 116; the respirations 46. On the 5th, pulse 120; respirations 52. On the 6th, pulse 138; respirations 52. On the 7th, pulse 140; respirations 52. And these changes took place, notwithstanding that the largest quantity of stimulants was again administered, and that the infusion of serpentary was substituted for rhatany, with increased quantities of ammonia and chloric ether.

On the 7th a very serious symptom showed itself, which in part explained the rapid declension of his powers. This was hæmorrhage from the bowels. He passed on that day a large quantity of blood by stool, which evidently exhausted him very much. Turpentine was now administered in small and frequent doses, but on the 8th he passed some more blood. He was now evidently sinking, with an extremely rapid pulse and very quick breathing, and he died on the morning of the 9th, which must have been the thirtieth day of the fever.

Here, then, was a case in which no pains were spared to save life, so far as diligent treatment and careful nursing could accomplish that object; it terminated, however, unsuccessfully, and the patient died evidently in a state of extreme exhaustion. The treatment consisted in the early and free administration of support and stimulants, and in the use of counter-irritation over the chest and abdomen; turpentine stupes were used daily to the front and back of the chest for some time, and afterwards large blisters were applied, and the abdomen was occasionally stuped with turpentine. Close attention was paid to the state of the bowels; astringents were constantly given; and on one occasion, when the diarrhœa appeared most threatening, an opiate enema was given; thus the tendency to looseness of the bowels was kept so completely under control, that his weak state could not have been attributed to this. He was supported by a full allowance of strong beef tea, besides milk and arrowroot, and stimulants were given in large quantity, as I have already described.

Now, it behoves us to inquire, why did this patient die? Was there here the *nimia medici diligentia?* Were the quantities of food or stimulants too much for him? Was there any other treatment which we did not use but which we ought to have had recourse to? Or did death result from causes clearly beyond the control of all medical interference?

The *post-mortem* inspection showed that the morbid changes were limited to the chest and abdomen. In the former there was congestion of the lungs; but to an extent decidedly less than we had expected. The bronchial tubes, however, contained a considerable quantity of the thick yellow purulent matter which he was expectorating during the last few days of life.

But the most serious lesion was in the intestines. The lower part of the ileum contained numerous deep ulcers, some of which had eaten through the coats of the intestine so as almost to perforate. These ulcers were placed on the free margin of the intestine, and occupied the position of Peyer's patches. In the lower three feet of the ileum, we counted as many as seventeen ulcers; some of them were larger than a shilling. The floors of some of them consisted only of peritoneum and a little lymph. One very large ulcer existed on the iliac side of the ilio-cœcal valve. In addition, several of the solitary glands were enlarged, and some ulcerated, and the mesenteric glands were enlarged.

I need hardly say, that from our experience of cases of this kind, and from the diarrhœa, controllable although it was, and the tympanitis, and the hæmorrhage ultimately, we were quite prepared to find ulcerative disease in the intestine; although, owing to the mildness of the symptoms referrible to the bowels, we might well be surprised to find such large ulcers, and so many of them.

This extensive lesion of the mucous membrane of a part of the intestinal canal so important to nutrition as the ileum, must have contributed mainly to the state of prostration of this patient which persisted for so long a time, notwithstanding the abundant supplies of nourishment which were given him. And yet it is difficult to explain precisely how these ulcerations could have occasioned all this debility, inasmuch as there was no excessive diarrhœa, no great drain from his system, nor did they interfere with the due digestion and absorption of his food, for the quantity of fæces formed was not unusually great, nor out of proportion to the amount of food taken. It is plain enough, that notwithstanding the disease in the ileum, gastric and duodenal digestion and chylous absorption in the jejunum must have gone on sufficiently to admit of the appropriation of the greatest part of the food given.

It cannot, then, be said, that this patient had too much food; if he had, surely we should have found in the bowels large quantities of fæces and portions of undigested food, and during life there would undoubtedly have been flatulence and distress, referrible to the stomach, and other signs of indigestion, none of which existed. Nor can it be said that he had too much stimulant; for we had this most striking fact, that with the increase of stimulants the pulse on successive days fell from 120 to 84, and that with the diminution of it it rose again to 120 and 130. Under the highest stimulation, all the symptoms improved; the chest became more free, the head clearer, the fever less, the tongue cleaner. It was quite evident that both food and brandy were fully digested and absorbed. We cannot, therefore, plead guilty to the charge of *nimia medici diligentia.* And, on the other hand, I am not aware that anything else could have been done for him besides that which was done. I know of no medicine or remedy more applicable to his symptoms and morbid condition than those which we used. There are those who place great confidence in the powers of mercury to promote the healing of such ulcers as this man had in his ileum. I confess my faith does not carry me so far; and I think most practical men, now-a-days, would eschew the use of mercury where they had reason to believe that the small intestine was ulcerated, or likely to become so.

The rapid change for the worse which followed the hæmorrhage from the bowels indicated sufficiently that that was the *immediate* cause of death. If the hæmorrhage had not taken place there can be no doubt his life might have been prolonged a few days. But the small quantity of blood lost was quite insufficient to cause death, if there had not previously existed a state of great depression. I have frequently seen much more blood passed by patients who have afterwards perfectly recovered.

I repeat, that were it not for our experience of the constant accompaniment of a state of prostration along with a few ulcers of the small intestine, it would be impossible to believe that so grave an effect would follow such a cause. It is true that in this patient the ulcers were not few, but they were found in but a small portion of the intestine, namely, in a space three feet in length, leaving twenty-seven feet of the highest part of the bowel intact. I have, however, seen a state of as great, if not greater, prostration, where there were not more than four ulcers. What seems most essential to the production of this state of prostration is, that the sloughing and ulcerative process should be quick, and that it should be perforative in its tendency; that is, eat quickly through the tunics of the bowel, as was the case with Gavin, in whom we found, that at several points the coats of the bowel had been so eaten through as to leave only a little lymph and a thin film of peritoneum as their floors

But the ulcers are not the only mischief existing in connexion with the bowels in these cases. The mesenteric glands are likewise diseased, swollen, and evidently irritated by some abnormal matter passing through them. No doubt the state of these interferes with due chylous absorption, but still scarcely to a sufficient extent to account for the prostration, for the food is absorbed, and a good deal of it is of a nature (as the oily matter of the milk,) which must assume the state of chyle prior to absorption.

It seems to me that the production of this state is due not so much to imperfect appropriation of food, as to the absorption of a matter from the ulcerated surfaces, which, circulating with the blood, exercises a poisonous and depressing influence—a matter of the nature of, if not identical with, pus—which is absorbed by the lacteals, and perhaps also by the blood vessels, but probably chiefly by the former, by which route it quickly reaches the lungs, without passing through the liver, where it may contribute to

the increase of the bronchial congestion and irritation which so constantly accompany this typhoid state. This view I have often broached to you already at the bed-side of patients suffering in this way.

I show you here a preparation which was put up for me some time ago by Dr. Beale. It exhibits a few well-marked deeply perforating ulcers of the ileum, having much the appearance, from the thick, swollen, and red margins, that the process of sloughing and ulceration was a quick one. In this case, (the patient was a young woman,) the fever ran its course in fourteen days, the diarrhœa was almost none, and the chief symptoms were a tympanitic abdomen, stupor, (in fact coma,) bronchial congestion, and extreme prostration. A short time ago, you may remember, a woman of the name of Lock, who went off very quickly likewise with similar symptoms, the stupor being so great that I was afraid that a few drops of laudanum administered with starch. to check diarrhœa, had narcotised her. There was in this case, in addition to the stupor, bronchial congestion and prostration, but the diarrhœa was very slight, and readily controllable.

Now, that the absorption of pus is capable of producing these depressing effects we have many proofs.

First, in puerperal fever. In some cases the absorption seems to take place rapidly, and in large quantity, and, under such circumstances, the patient succumbs in a few hours from rapid prostration and pulmonary congestion, with more or less of stupor. In other cases, the absorption seems more gradual, the typhoid condition is induced more slowly but very completely, and, after a time, purulent deposits are found in the joints and muscles.

Secondly, In cases of erysipelas, in which the suppurative process is rapid; we have typhoid and comatose symptoms, which are out of proportion to the extent of lesion; in such cases doubtless pus finds admission into the circulation.

Thirdly. We sometimes have unequivocal evidence of the absorption of pus, as well as to the source whence it comes, as with respect to the secondary deposits. I remember attending a case in private practice, where the pus showed itself in the anterior chamber of the eye. This case presented all the symptoms of typhus fever; and for a day or two I viewed it as such. I was one day much surprised at observing pus in the anterior chamber, which increased in quantity very rapidly, and pus was afterwards found in the elbow and shoulder joints. When we came to examine this patient, we found an ulcer in the heart, at the base of one of the mitral valves. Some years ago, we had a case in the hospital of a woman who was suffering from chronic bronchitis; she suddenly became typhoid, and I looked upon it as a case of most aggravated character. She died in a few days, and we found an abscess in the septum of the heart, which had burst, and thus the pus had entered the very fountain of the circulation, producing the symptoms exactly resembling those which come on in a case of low typhoid fever.

There seem, then, sufficient grounds for explaining the prostration and fatal termination in Gavin's case, without ascribing any ill effects to either what had been done for him, or to what had been left undone. The sloughing and ulcerative process undoubtedly interferes, to a certain extent, with the function of the bowel, but it also furnishes a source of formation of a poisonous matter, which, we know by experience of analogous cases, when taken into the system, creates symptoms of the same character in other cases.

There is another mode of termination of these cases of typhoid or enteric fever for which you should yourselves be prepared, and for which you should prepare the friends of the patient when you may see sufficient reason to apprehend it. I mean, that by perforation; one of those films of peritoneum, which I have already alluded to as forming the floor of many of the ulcers, gives way, and the contents of the bowel pass into the peritoneal sac. In some cases of long duration, when the patient seems to have struggled, day after day, against the assaults of death, rapid sinking immediately follows the perforation, and, indeed, signalises its occurrence. No new pain is felt, but the patient grows rapidly weaker; the pulse, too, fails, becomes rapid and fluttering, and death from exhaustion or fainting quickly ensues. In other cases the occurrence of the perforation ushers in severe pain in the abdomen; sometimes vomiting; tenderness and pain on pressure; tympanitis; with also increased prostration; all signs of peritonitis induced by the irritating influence of the intestinal contents upon the peritoneum. When these latter symptoms make their appearance, the free exhibition of opium in large and frequently-repeated doses is the only measure to which the practitioner can have recourse with any hope of success.

Had Gavin not been carried off by the exhaustion consequent on the hæmorrhage, it is very probable, from the state of the ulcers, that perforation must have taken place, of which he would have died in either of the two ways which I have described.

A third mode of termination is by colliquative diarrhœa. The patient may be going on well, and the practitioner may even be sanguine in his expectation of a favourable result, when the diarrhœa may suddenly become colliquative, and a few discharges of large watery evacuations will carry off the patient.

But to return to the treatment of this case. It may be said, surely the irritation of the bowels was kept up by all the stimulants (to say nothing of the food) which were given, and had they been more sparingly given the ulcerative process in the ileum would not have gone so far.

This notion respecting the injurious effects of alcoholic stimulants, in cases where there is a tendency to bowel affection, is, I think, partly founded upon a vague supposition that the alcoholic fluid comes in direct contact with the irritable mucous membrane; whereas we have the strongest reason to conclude, that fluids of this kind never pass the pylorus, but are absorbed by the walls of the stomach. This is especially the case when they are administered in the way I recommend,—that in which they were given in Gavin's case,—namely, in small quantities, with intervals of not less than half an hour between each dose. Thus one dose is absorbed before the other is given.

But it may be urged, that the alcohol gets into the blood, circulates with it, and so increases the tendency to ulceration.

Now, upon this point we can only appeal to experience. The administration of alcohol to healthy persons does not prove injurious by any irritative effects it may produce on the bowels. Of all the ill consequences which the advocates of the teetotal system, in their most praiseworthy zeal, have summed up as likely to be caused by the use of alcohol, I do not find that diarrhœa or ulceration of the bowels is noticed; and were it a frequent effect, it certainly would not have escaped the scrutiny of these gentlemen. It is true that a debauch, in which a man may drink at one sitting as much, or considerably more, than we should think of giving in twenty-four hours, may sometimes disturb the liver, and, through its increased secretion of bile, the bowels; but the looseness thus excited seldom or never proves otherwise than salutary.

Nor do we find that effects of this kind are apt to follow the liberal administration of alcoholic stimulants in other low diseases; in erysipelas; in the diffuse inflammation of the areolar tissue, whether traumatic or not; in puerperal cases; and we give it repeatedly in cases with threatened or actual ulceration of the bowels, without any increase, but, on the contrary, a marked diminution of the unfavourable symptoms. Such, indeed, was the case with our patient Gavin. On the first few days of his taking stimulants, a manifest improvement took place in all his symptoms, those affecting the bowels as well; so much so, that until the *post-mortem* examination revealed the true state of matters, I blamed myself for diminishing his supply of stimulants on the 3rd. Probably the good effects continued until the purulent matter had entered the circulation in sufficient quantity to produce its poisonous effects.

I could enumerate many instances in which this mode of treatment by free stimulation was of great and signal advantage. But I must content myself with referring to some cases of this kind which have been lately treated in the hospital.

Many of you will recollect the case of Lucy Wood, aged 14, who was in the house about three months ago. She took as much as an ounce and a half of brandy every hour for three days together, and for the next fortnight half an ounce was hourly administered; this latter quantity, however, being sometimes much increased, as occasion required. Under this large amount of stimulants, her symptoms gradually improved, and she was discharged quite well on the 4th December, having been about nine weeks under treatment.

This girl laboured under the great disadvantage of heart disease. A loud systolic bellows-sound, heard most dis-

tinctly at the apex of the heart, was present when she came in, and resulted from an attack of rheumatic endocarditis, which occurred some time ago. She was admitted on September 26, and on October the 4th her symptoms began to assume a very severe character, and she was evidently getting very low. At this time she was also suffering from diarrhœa, for which she was taking astringents and chloric ether, and on one occasion it was thought advisable to administer an opiate enema.

On November 1 she was in a state sufficient to warrant us in diminishing the quantity of stimulants. The pulse had now, however, only fallen to 120; and on the 4th it was 114. After she had recovered from the fever, a very painful node formed upon the anterior surface of the tibia, which, however, ultimately did perfectly well.

There was another case, of a man of the name of Bigg, who took large doses of brandy. His case was complicated with diarrhœa.

At one time he took twenty-four ounces of brandy in the twenty-four hours.

He was admitted on the 3rd, and was convalescent on the 23rd of September.

I may mention the case of another patient, named Bevan, who was admitted into Lonsdale Ward on September 17th. She was ill for nearly six weeks, and suffered from obstinate vomiting (which obliged us to administer the stimulants only in small quantities at a time) and great diarrhœa. Nevertheless her case terminated favourably, and she was discharged on the 5th of October.

All these may be called desperate cases, in which the pulse was very rapid and feeble, and the tendency to death from exhaustion was very great. All were accompanied by diarrhœa, which in all became considerably less under the largest doses of stimulants.

I have made these remarks to you upon the subject of the treatment of fever by stimulants (and they apply not less to the treatment of other exhausting diseases—erysipelas, influenza, bronchitis, carbuncle, etc.,) because I wish to caution you against the morbid fear of over-stimulation, which leads many to adopt a contrary course, and to allow their patients to die from exhaustion. This is the mode of death to which typhus patients are peculiarly prone; and I hold that the lower you allow them to become at first, the more likely is the ulcerative process in the intestines to take head just as it is apt to do in the bowels and in the corneæ of the eyes in cases where there is an insufficient supply of properly nutritious food. At the same time, I must beg that you will not run away with the notion, that every case of fever about which you may be consulted is to be treated with thirty ounces of brandy a day. There are many cases in which no stimulant at all is necessary; others, again, in which it is never needful to give more than four or six ounces a day. You must bear in mind that we have two classes of cases of fever to deal with, the mild and severe, or those which have had a large and those which have had a small dose of the peculiar poison on which the febrile state depends. Where a large dose of the poison has been received into the system, you will generally find it necessary to give large quantities of stimulants, or the patient will not have sufficient vital power to resist the depressing effects of the poison. Some few cases, indeed, there are in which the dose of the poison is so large, that the patient never rallies from the state of almost complete paralysis which it induces; such cases run their course in twenty-four or forty-eight hours, or within a week. But the mild cases—and fortunately in many epidemics these are the most numerous—do perfectly well on a very moderate amount of nourishment, with little or no stimulant.

The objections which some excellent practitioners have to the use of stimulants apply with more justice to the slovenly mode in which they are too often given. Frequently left altogether to the discretion of a nurse, or given in large doses at once, or with other food, or without any reference to the medicines which are being likewise administered, they create derangement of the primary or stomach digestion, flatulence, and flushing. If you give stimulants, give them with due regard to their digestion by the stomach, and so as not to interfere with the other food, or the medicines likewise being given.

I am convinced that it is much better to err on the side of over-stimulation than not to give enough; for, if we have over-stimulated a patient, it is very easy to pull him down again, there are plenty of appliances and means for this purpose; but if the patient sink too low, nothing is more difficult than to restore him. If by your feeding and stimulating, the thermometer of life has risen to too high a point, nothing is easier than to depress it; but if fallen below a certain point, then to raise it again, much more to restore it to the height from which it fell, "*hic labor hoc opus est.*"

In conclusion, let me say a word or two as to the treatment to be pursued when you have reason to fear that the bowels are ulcerated. It seems to me that the great principle of treatment in such cases is to keep down peristaltic action, which is best done by opium and astringents containing tannin or gallic acid. Many attach great value to the use of sulphate of copper; but, as it is generally given with opium, and certainly does not agree without opium, I think the latter drug has the largest claim to the good services often done by the combination. When hæmorrhage occurs, nothing is so effectual to restrain it as turpentine given in small doses, so as not to risk offending the stomach; even so small a dose as five minims is often sufficient; and I frequently apply it externally as a stupe to the walls of the abdomen with decided benefit. In dealing with these cases, you must not be timid as to allowing the bowels to remain inactive for even several days. I have never seen any bad consequence from their not acting even four or six days; and when they are to be provoked to act, let that be done by some simple enema rather than by aperient medicine.

ORIGINAL COMMUNICATIONS.

OBSERVATIONS ON THE LOCAL TREATMENT OF ULCERS OF THE LEG.

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[Continued from p. 131.]

SOURCES OF THE INTRACTABILITY OF ULCERS ON THE LEG, COMPARED WITH THOSE OF OTHER REGIONS.

Local Source of the Indolence of Ulcers on the Leg.—I repeat the concluding sentence of my former paper:—"Unless a due proportion be maintained between the vascularity and the rate of deposition in a granulating surface, that process will not long be carried on healthily." Now the capillaries of an ulcer in a depending part, being acted upon by two opposing forces,—the *vis a tergo* of the heart and arteries on the proximal side, and more or less pressure, according to the weight of the column of blood in the veins, bearing on their distal extremities,—circulation through them is impeded, their dilatation becomes excessive, and, the balance between vascularity and deposition being disturbed, reparative action is impaired if not wholly suspended. The naked eye will readily detect this redundant vascularity in the large, loose, semi-transparent granulations formed under circumstances so unpropitious, especially when compared with those of a healthy ulcer. In the one case they present the appearance of a mere congeries of membranous cells, surcharged with purple blood; in the other, they are small, round, compact, and florid, looking solid and fleshy rather than cellular. But this disproportion is still more clearly seen in microscopic preparations of injected ulcers. One of Mr. Quekett's very beautiful collection, taken from a subject in whom the veins were varicose, exhibits the capillary vessels considerably more dilated and convoluted than in the rest of the series, scarcely any space being left for interstitial deposit. If the distention thus produced be not artificially counteracted, the nearly stagnant blood being quite unfit for any healthy operation, exudation of plastic lymph ceases, the new vessels themselves are gradually absorbed, and the sore at length acquires an indolent or atonic habit. This may be received, in fact, as the natural history of chronic ulcer on the leg; since, if left to itself, whatever other phases it may pass through before it reaches the atonic

stage, "to this favour will it come" at last. "It is immaterial," says Sir Everard Home, "whether in its origin an ulcer was healthy, weak, or irritable; if not cured within a certain time it becomes indolent.(a)

Local Sources of their Irritability.—But the mischief arising from this state of mechanical congestion is not confined to the blood-vessels; the nerves associated with them, oppressed and irritated by their over-distension, are not merely incapacitated for the healthy discharge of their share in the reparative function, but are kept by it in a constant state of morbid sensibility. This amounts, in many cases, to something beyond a transient affection, symptomatic of the oppressed condition of the circulation; it either becomes an enduring and distinctive character of the sore, as a consequence of the long-continued irritation to which the nerves have been exposed in neglected and mismanaged cases, or may have been an original feature from its earliest period. Dr. Billing suggests, that morbid sensibility may sometimes be caused by inflammation of nerve; adding, "I know of no ot er term by which to express their lesion." (b) This appears to be a very probable explanation of the persistent irritability last referred to, which yields more commonly to local antiphlogistic measures than to any other treatment. As its tense and fiery look would denote, it is often far more acutely felt in the surrounding skin than in the ulcer itself; and this is especially the case with sores situated upon or behind the malleoli, the protuberance of which keeps the inflamed integument continually on the stretch. In irregularly-shaped sores about the ankle, a mere point of skin jutting out from their margin will occasionally be the seat of pain, recurring at uncertain periods with increased severity. During the paroxysm, this spot becomes more prominent, and so exquisitely sensitive, that the patient cannot obtain ease in any position. Now and then, I have seen a drop of serous fluid exude from the surface of such an eminence, which has apparently afforded speedy relief. The excessive pain which, in some instances, attends Varix, is ascribed by Sir B. Brodie, in his Lectures, to the presence of a nervous filament strained across the tumour. The acute sensibility of varicose ulcers is, I believe, more frequently occasioned by chronic inflammation of the enlarged veins,—a complication which will be more fully considered under the head of Varicose Ulcers.

Some writers have laid down positive diagnostic marks by which an irritable sore may be at once recognised; but there are no invariable external indications of morbid sensibility; it is manifested by ulcers of a great variety of aspect, and, as long as it continues, proves an almost certain obstacle to healthy secretion and granulation.

Local Source of their Callousness.—The deposit of coagulable lymph in which the majority of ulcers on the leg are imbedded, is so much greater in degree than we meet with it in those of other parts as a mere sequel of inflammatory action, that its excess may fairly be attributed to the locality, and regarded as one of the accidents of their position. Sir Charles Bell, in his 'Institutes of Surgery,' noticing "the welt around the ulcer" as a peculiarity of the complaint, ridicules an idea propounded by some author, that it is a "circumvallation thrown up for the defence of the sore." It is not very clear what is meant by this figure of speech; but, interposed as it is between the subjacent vessels and the new capillaries forming on the surface of the sore, this "circumvallation" does appear to act as a barrier to check a too free egress of blood from the former, and secure the yet fragile walls of the latter from plethora or rupture, and may thus be looked upon as a special provision of nature to guard against the mischief to which the vessels, engaged in an attempt to repair a breach of surface in a depending part, would otherwise be constantly exposed. In ulcers prone to hæmorrhage, I have almost invariably noticed that this deposit is absent; and, when its absorption has been effected by art, nearly all sores bleed as soon as the bandage is taken off, if the foot be allowed to hang down. Be this as it may, the longer the case is neglected the more does this obstruction increase in amount, until it so interrupts the circulation from beneath, that only a sufficient supply of blood seems to reach the surface through it, to support a feeble vitality, but not enough to set on foot the reparative process. To a chronic ulcer in this low state of vascularity and sensibility, the epithet callous is aptly enough applied; and there is but little prospect of healing such a sore until the absorption of its indurated base and margin be accomplished.

But callous ulcers are not necessarily insensible. Many an old sore, with pale, shining, bloodless surface, and thickened margin, the rugged skin of which resembles that of the sole of the foot, is as painfully sensitive as the most angry-looking ulcer. This combination of callousness and irritability is not unfrequent in sores lying behind or below the ankle, and perhaps no specimen of the disease is more difficult to deal with. In some of these cases the sore is almost tied down by adhesions to the back of the malleolus, and the morbid sensibility has appeared to me to be augmented, if it is not caused, by the pressure of the indurated skin and the deposit beneath it upon the nerves of the part. On the other hand, it is by no means unusual to find an insensible sore of long standing become extremely tender as soon as it has been brought into a healing condition by the absorption of this deposit, and continue so until nearly cicatrized. It is well to bear this in mind, or we might be tempted to abandon a suitable mode of treatment at the very time it is most promising.

Varicose Ulcers.—The frequent co-existence of a varicose enlargement of the superficial veins of the limb with ulcers on the leg, and the greater difficulty in curing them when thus complicated, have led surgeons to regard Varix as a distinct source of intractability, and to describe them as a distinct class, under the name of varicose ulcers. And, when the veins are dilated to such an extent as to annul the function of their valves, the impediment to the circulation,(a) and, consequently, to the establishment of healthy granulation, will undoubtedly be greater, in every form of ulcer, in proportion to the increased weight of the column of blood in them; but this is simply an aggravation of the ordinary difficulty under which the capillary circulation of a sore in any depending part must always labour, until it be removed by artificial aid. Applied thus comprehensively to all ulcers accompanied by a varicose state of the veins, the term indicates nothing more than an increased disposition to atony, implying a difference in degree, but not in kind, between varicose and indolent sores. By some surgical authorities, however, it is restricted to ulcers which have been directly caused by the distension and inflammation of the skin, consequent on enlargement of the veins. In this signification it is employed by Sir B. Brodie in his thoroughly practical lectures on this variety of sore; and it would seem to be so understood by Mr. Vincent, albeit such a limitation is scarcely reconcilable with his statement, that "we may trace the greater number of sore legs to the presence of Varix;" since, in comparison with the number complicated by this malady, the proportion actually caused by it is small.

The physiognomy of the ulcer caused by Varix is, in its early stage, so uniformly characteristic, as in a great measure to justify its being regarded as a distinct variety. It is generally a superficial sore, lying in the centre of a patch of discoloured skin, the tint of which varies from a dusky yellow to a purplish brown. Its margin is not elevated or well defined, as in common cases of indolent ulcer, but blends almost imperceptibly with the surrounding skin, so that, when the surface of the sore is livid, during the dependent position of the limb, it is often difficult to discover the exact line where the ulcer commences. But when it has existed for any great length of time, its margin becomes thickened and indurated by the deposition of lymph, and it is no longer distinguishable from an ordinary indolent or callous sore.

Mr. Vincent is of opinion that, in very many of these

(a) Practical Observations on Ulcers of the Leg, p. 189.
(b) Principles of Medicine, p. 47, 5th Edition.

(a) Mr. Skey has expressed a doubt, whether varicose dilatation of the veins offers any obstruction to the circulation in the capillaries of an ulcer on the leg. This question is so entirely set at rest by the following simple experiment, instituted with the view of explaining how obliteration of the trunk of the saphena may afford relief to a varicose state of its branches, that I cannot refrain from quoting it:—"If I put on a bandage," says Sir B. Brodie, "and squeezed the blood out of the veins below, and then put my finger on the vena saphena above, so as to stop the circulation through it, I found, on taking off the bandage, the patient being in the erect posture, that the cluster of veins below filled very slowly, and only from the capillary vessels. But if (the patient being in the erect posture) I removed the pressure from the saphena, the valves being of no use, the blood rushed downwards by its own weight, contrary to the course of the circulation, and filled the varicose cluster below almost instantaneously."—Lectures, p. 187. As long as the varicose limb is at rest in the horizontal position there may be actually less obstruction to the circulation than when the veins are in a normal state; but the case is widely different when circumstances compel the patient to stand or walk.

cases, subacute or chronic inflammation of the veins is superinduced upon mere dilatation. I have already expressed my belief, that to this cause the morbid sensibility of ulcers thus complicated is frequently owing; the pain may be distinctly traced, by the finger, from the sore along the course of the vein or veins affected; and is sometimes felt most severely in those below the sore,—a proof that it does not depend upon distension alone. It is by no means uncommon, moreover, to find an old varicose vein lying in a channel hollowed out partly by its own pressure, but the depth of which is materially increased by the deposition of lymph, the product of inflammation, communicated, doubtless, by the diseased vein to the cellular tissue surrounding it. This circumstance may account for the elongated oval form varicose sores so often assume, the ulceration naturally creeping upwards in the track of the inflamed vein. Whether all these peculiarities originate in inflammatory action or not, in no form of ulcer on the leg is the ordinary source of the refractory nature of the complaint more readily demonstrated. Excessive as is the congestion so long as the foot is dependent, immediately the limb is raised to the horizontal position, the dark blood is drained off from the turgid capillaries through the ample space of the dilated veins, and the activity of the circulation is restored, as the sudden change which the surface of the sore undergoes, from purple to florid, sufficiently testifies.

Although, therefore, inflammation of the veins may be present in not a few instances, and circumstances attending their origin, not yet fully explained, but probably resulting from the extension of inflammatory action to the subcutaneous tissues, may stamp them with a very distinct aspect, I think we are scarcely warranted in assuming that any source of intractability exists, in ulcers directly caused by varicose veins, different or distinct from that which predominates in the indolent species. At any rate, we shall gain nothing, in a practical point of view, by retaining the distinction between sores caused by Varix and those which are merely complicated by its presence, since precisely the same means which cure the latter will prove equally successful with sores of the peculiar character above described.

But I am disposed to go further still, and contend that we ought to discard the term *varicose ulcer* from our classifications altogether. If it be restricted to ulcers caused by Varix, a large proportion of cases, the cure of which is rendered more difficult by this complication, will not be included under the term. If, on the other hand, it is applied to every sore accompanied by a varicose state of the veins, it will necessarily comprehend all other classes of ulcer in turn. All this confusion will be avoided, and the nature of one of these cases will, I conceive, be defined much more simply and accurately, if, instead of employing a designation so vague and general, we substitute for it the phrase, indolent, irritable, or callous ulcer, *complicated by the presence of Varix.*

Recapitulation.—Clear and distinct as the divisions of an artificial arrangement appear to us, in nature the effects are mixed and not simple. Although classified, for the sake of convenience, under the predominant types which usually characterise them, ulcers on the leg are seldom met with in the pure form of any one of the three heads specified. Not only are these local distinctive features mingled in various proportions, but with them are blended constitutional peculiarities, each of which claims its due share of attention. Confining our views more particularly to the former, it is plain that the inherent and substantial source of intractability in this complaint, is the obstruction to free circulation through the sore caused by the dependent position of the part—an obstruction, of course, considerably increased when the veins are varicose. Where great excitability of nerve, or inflammation of the veins exists, the character of morbid sensibility will be superadded; and, as the result of chronic inflammation, or of prolonged congestion of the subjacent vessels, more or less deposition of lymph will occur around and beneath the sore. The supervention of acute inflammation may, at any time, convert an atonic, irritable, or callous ulcer into an inflammatory, phagedænic, or sloughing sore; but, these accidents overcome, and its irritable or callous features removed, the substantial source of intractability, so frequently alluded to, will still remain in force, and generally outweigh the unassisted efforts of nature to repair the injury.

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[To be continued.]

CASES AND OBSERVATIONS

ILLUSTRATING THE THERAPEUTIC EFFICACY OF

DILUTED HYDROCYANIC ACID

AS A TOPICAL APPLICATION IN CERTAIN

AFFECTIONS OF THE EYE.

By JAMES VOSE SOLOMON, Esq., M.R.C.S.,

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In January, 1842, I commenced an investigation into the remedial properties of diluted hydrocyanic acid as a topical application in diseases of the eye. I was induced to do so, from having seen it applied by Mr. Charles Guthrie in every stage of strumous ophthalmia at the Westminster Eye Infirmary, on a visit which I paid that charity in the preceding December (1841). After having prescribed it ten or twelve months in a great variety of ophthalmic cases, I found that, like other remedies, certain rules might be laid down for its application, the correctness of which I have had many opportunities of confirming during the last nine years. One part of Scheele's prussic acid, diluted with two parts of distilled water, has appeared to me in general to be the best formula for use, though, in some instances, greater concentration or dilution may be required. When a drop of dilute prussic acid of the first-named strength is applied to the conjunctiva of a healthy eye, there follows a sense of slight uneasiness and warmth, with congestion of the vessels of the part, lasting for a few minutes; the pupil is slightly dilated. If a more concentrated preparation, say equal parts of Scheele's acid and distilled water, be used, there will be, in addition to these symptoms, aching pain in the eye-ball.

The pain attendant on the external ophthalmiæ in their acute stage is generally aggravated by the application of even the most diluted form I have mentioned, though, in some few instances, it has not produced such effect. It is when the acute stage has been subdued by appropriate treatment, or in cases where the symptoms of irritation are greater than those of vascular excitement, that the diluted hydrocyanic acid proves to be of singular benefit. A lingering chronic stage, with the liability to relapses, is averted; dimness of vision, intolerance of light, and lachrymation, quickly yield to its calmative powers.

The following cases will afford a correct idea of the circumstances which chiefly indicate the application of the remedy under consideration.

(a) CONJUNCTIVITIS CATARRHALIS. (b) CONJUNCTIVO-SCLEROTITIS.

Case 1.—Mr. H., 38 years of age, consulted me on the 31st of October, 1842, for an attack of acute catarrhal ophthalmia of the right eye; he complained of a distressing sensation of sand in the organ: there were slight intolerance of light, and lachrymation. The cornea was clear; the upper lid, on being everted, did not show the presence of any foreign body.

Treatment.—Leeches, fomentations, and mercurial purgatives constituted the treatment up to the evening of the 3rd of November, when, the inflammation being much subdued, two or three drops of diluted prussic acid (1 to 2) were applied to the conjunctival surface of the affected organ. It produced almost immediate soothing effects. The drops were applied twice during the next day, after which no further treatment was needed. Duration of treatment, four days.

On the evening of the 18th of February of the following year, 1843, I was requested to visit the same gentleman. I found him suffering from an attack of acute conjunctivo-sclerotitis of the right eye, of two days' duration, brought on by exposure at night to an easterly wind. He complained of severe shooting pains in the eyeball, and of a fixed pain in the right cheekbone, of great intolerance of light, and epiphora; there was a trifling sensation of sand in the eye. The cornea was transparent, and the iris, so far as I could ascertain, normal. The pupil somewhat contracted. There were not any pains of a rheumatic character in the muscles or joints. Febrile disturbance. Bowels costive. Mr. H. stated, that, having in his previous attack received so much comfort and benefit by the application of the drops, he had had recourse to them on the morning of the 18th instant, and that afterwards his sufferings were much increased.

Treatment.—The treatment of the case was strictly antiphlogistic up to the evening of the 20th, when, the inflam-

mation and attendant symptoms being much lessened, the drops of dilute prussic acid were applied to the eye, and there resulted a delightfully soothing sensation. In the course of the next day the acid was used twice. On my visit in the evening, all traces of inflammation had disappeared. Duration of treatment four days. In each of the attacks related, the patient was confined to a warm room, from which bright light was excluded, and he almost entirely abstained from his ordinary literary pursuits.

Remarks.—This case derives its principal interest from affording an opportunity of testing the remedial properties of diluted hydrocyanic acid in two attacks of ophthalmia occurring in the same individual, viz., catarrhal conjunctivitis and conjunctivo-sclerotitis, or, as it is conventionally termed, catarrho-rheumatic ophthalmia,—diseases which, although often, as in this instance, excited by a similar cause, (the prevalence of easterly winds,) are yet pathologically, and in the symptoms to which they give occasion, very different. In the first ophthalmia, where the mucous covering of the eyeball was principally in fault, the sclerotic veins alone being somewhat congested, the sufferings were trifling in comparison with the second seizure, in which the fibrous coat was also acutely inflamed.

The impropriety of using the remedy under consideration during the acute stage of an ophthalmia, and the great advantages derivable from its "calmative" and anodyne properties, after the exhibition of antiphlogistic measures, are well shown. It is very unusual for an attack such as this gentleman suffered on the second occasion, to terminate in four days.

When conjunctivo-sclerotitis has, either from neglect, injudicious treatment, or other causes, involved the transparency of the cornea or iris, or both, a stage in which the posterior and internal tunics frequently partake of the general mischief, the cure is much more difficult and uncertain.

RHEUMATIC OPHTHALMIA, CORNEITIS, (AND IRITIS?)

Case 2.—A man, 31 years of age, a confectioner, of delicate frame and strumous diathesis, who had not previously suffered from illness, consulted me for an attack of conjunctivo-sclerotitis, involving the transparency of the superior two-thirds of the cornea, and, as I suspected, the iris. There was considerable conjunctival and sclerotic redness, accompanied by severe circumorbital pain, intolerance of light, and epiphora to a distressing degree.

The disease was attributed to cold. The patient had been under treatment at a public institution for more than three weeks. The application of leeches, seclusion in a darkened and warm room, with the exhibition of calomel, in combination with Dover's powder, to the extent of slight ptyalism, subdued, in the course of ten days, the acuteness of the inflammation. The mercury was now given in alterative doses, and two grains of quinine were taken three times a day; belladonna rubbed into the brow. Upon the fourteenth day of the treatment, matters stood thus: Trivial zonular circumcorneal redness, a thin opacity of the cornea, iris bright, eye very irritable to light, epiphora. To alleviate these symptoms, vinum opii and diluted hydrocyanic acid were applied, a trial of three or four days being given to each. The patient finding much greater relief from the latter, with which my observation concurred, earnestly begged for its continued application, and the request was granted. The symptoms gradually subsided under its use, excepting a slight weakness of vision, for which vinum opii proved an efficient remedy. The recovery was perfect. I have frequently seen this patient since his recovery, (now several years ago,) when he has told me that his eyes have continued in all respects well.

SYPHILITIC IRITIS.

Case 3.—Ann Parsonage, 22 years of age, of phlegmatic temperament, was an inmate of the Kings Norton Workhouse in June, 1842, and confined to her bed while taking mercury for a syphilitic eruption on the skin. On one of my visits, I noticed that the conjunctiva of the right eye seemed to be affected with serous chemosis, and that a few straight vessels were scattered over the sclerotic membrane; the iris was bright, the pupil a little more contracted than its fellow; there was little pain in the organ. Two days afterwards, the eye presented a zone of pink vessels around the periphery of the cornea, and two rusty-coloured tubercles upon the free margin of the iris; the patient complained of frontal headache.

Exciting Cause.—Inquiry elicited that on the day preceding the first anormal appearances of the eye, she had left her bed in a state of perspiration, and, with only her nightdress on, exposed herself for half an hour before the draught of an open window.

The *Treatment* consisted of hot fomentations to the affected eye and temple; the more frequent exhibition of the mercury; and, when slight ptyalism was apparent, a blister was placed upon the back of the neck, and extract of belladonna rubbed into the brow. Under this treatment, with low diet and confinement to bed, the sclerotic redness disappeared, and the lymph tubercles were gradually absorbed. The eye, after her discharge from the sick-ward, was dim and watery, for which I directed a few drops of diluted prussic acid (1 to 2) to be applied within the lids every night and morning, and in the course of four or five days the vision became clear and useful.

[To be continued.]

REMARKS ON THE ETIOLOGY OF PHTHISIS.

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[Continued from last Volume, page 640.]

PAPER VI.

INFLUENCE OF OCCUPATION OVER THE DURATION OF PHTHISIS (CONTINUED.)

Table 46.

Group.		Months and under.	Years & upwards.
2.	Stable and cabmen, etc.	6, 9, 12	2
3.	Men and servants, etc...	3, 6, 9	2
4.	Plumbers, etc.	3, 6	2
5.	Out-door servants, etc...	3, 6, 9, 12	
6.	Shopkeepers, etc. ..	12	2
7.	Workers in wood, etc. ..	3, 6, 9, 12	2
8.	Stonemasons, etc. ..	12	2
9.	Professional men ..	3	2
10.	Clerks, etc.	12	2
11.	Tailors		2
12.	Bakers, &c.	3, 6, 9, 12	
13.	Scientific instruments, etc		2
14.	Soldiers..	3, 6, 9, 12	
15.	Mariners	3, 6, 9, 12	
16.	Publicans, etc.	6, 9	2
17.	Farmers, etc.		2
18.	Butchers, etc.	3, 6, 9, 12	
19.	General dealers, etc. ..	6	2
20.	Workers in leather, etc. .		2
21.	Machinists, etc.. ..	12	2
22.	Printers, etc.	12	
26.	Artists, etc.		2
32.	Weavers	3, 12	2
35.	Shoemakers	6, 9,	2
37.	Labourers	3, 6, 9	2

INFLUENCE OF OCCUPATION AND AGE OVER THE DURATION OF PHTHISIS.

The total number of instances where death occurred between age 10 and age 20, including those observed in the two sexes, is 289; and the whole are arranged in the following Table in the order of their frequency:—

Table 47.

General Table, both Sexes, æt 10 to æt 20—Number 289.

Order.	Periods of Duration Arranged in the Order of Frequency.	No. of Cases.	Proportion to the whole.
			1 in
1	6 months	64	4·3
2	12 ,, ...	47	6·1
3	4 ,, ...	33	8·7
4	9 ,, ...	32	9·
5	3 ,, ...	32	9·
6	2 ,, ...	18	16·
7	2 years	17	16·9
8	18 months	13	22·1
9	3 years	10	28·8
10	6 ,, ...	5	57·6
11	5½ ,, ...	4	72·
12	1 month	2	144·
13	2 weeks	2	
14	12 years	1	289·

Table 48.

		1 in
6 months and under	151	1·9
9 ,, ,, ...	184	1·5
3, 4, 6, 9 months	152	1·7
6, 9, 12 ,, ...	144	2·
12 months and under	231	1·2
2 years and upwards	37	7·8
3 months and under	84	5·3

If we separate the cases occurring in the two sexes, the order of frequency in the duration will be indicated in the following Tables, No. 49 to 52 inclusive :—

Table 49.

Males, No. 135, æt. 10 to æt. 20.

Order.	Periods of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	6 months	28	4·8
2	12 ,, ...	24	5·6
3	4 ,, ...	18	7·5
4	9 ,, ...	16	8·5
5	3 ,, ...	12	11·3
6	2 ,, ...	10	13·6
7	18 ,, ...	9	19·1
8	2 years	7	19·4
9	3 ,, ...	3	45·3
10	6 ,, ...	2	68·
11	2½ ,, ...	2	
12	15 months	2	
13	1 week	1	136·
14	2 weeks	1	

Table 50.

		1 in
6 months and under	70	1·9
9 ,, ,, ...	86	1·5
3, 4, 6, 9, months	74	1·8
6, 9, 12 ,, ...	68	2·
12 months and under	110	1·2
2 years and upwards	15	9·
3 months and under	24	5·6

Table 51.

Females, No 153, æt. 10 to æt. 20.

Order.	Periods of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	6 months	36	4·2
2	12 ,, ...	23	6·6
3	3 ,, ...	20	7·6
4	9 ,, ...	17	9·
5	4 ,, ...	15	10·2
6	2 years	10	15·3
7	2 months	8	19·1
8	3 years	7	21·8
9	15 months	5	30·6
10	18 ,, ...	5	
11	6 years	3	51·
12	2½ ,, ...	2	76·5
13	1 week	1	153·
14	2 weeks	1	

Table 52.

		1 in
6 months and under	81	1·8
9 ,, ,, ...	98	1·5
3, 4, 6, 9 months	88	1·8
6, 9, 12 ,, ...	76	2·
12 months and under	121	1·2
2 years and upwards	22	6·9
3 months and under	30	5

Thus, it is evident, that from age 10 to age 20, the termination of the disease under 12 months is much more frequent than at all ages. No marked difference exists in the durations of the disease in the two sexes at the age now under consideration, but on the part of the females there is a slight tendency to greater frequency in the short, and also in the most lengthened periods of duration.

The total number of instances occurring between age 20 and age 30 in both sexes, is 651; and the whole are arranged in the following Tables in the order of their frequency :—

Table 53.

General Table, both Sexes, æt. 20 to æt. 30—No. 654.

Order.	Periods of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	6 months	117	5·5
2	12 ,, ...	117	
3	9 ,, ...	91	7·1
4	2 years	63	10·3
5	3 months	58	11·2
6	4 ,, ...	56	11·6
7	2 ,, ...	40	16·7
8	3 years	30	21·4
9	18 months	21	31·1
10	15 ,, ...	19	34·4
11	6 years	14	46·7
12	1 month	10	65·4
13	21 months	7	93·4
14	10 years	1	654·
15	2 weeks	1	
16	1 week	1	

Table 54.

		1 in
6 months and under	283	2·3
9 ,, ,, ...	374	1·7
3, 4, 6, 9 months	322	2·
6, 9, 12 ,, ...	325	2·
12 months and under	491	1·3
2 years and upwards	116	5·6
3 months and under	110	5·9

Of these, 358 were males and 296 females, as indicated in the following Tables :—

Table 55.

Males, æt. 20 to æt. 30—No. 358.

Order.	Periods of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	12 months	71	5·
2	6 ,, ...	63	5·2
3	9 ,, ...	40	8·9
4	4 ,, ...	31	11·5
5	3 ,, ...	31	
6	2 years	30	11·9
7	2 months	26	13·7
8	3 years	15	23·8
9	15 months	13	27·6
10	18 ,, ...	12	29·8
11	1 ,, ...	6	59·6
12	21 ,, ...	5	71·6
13	6 years	4	89·5
14	2½ ,, ...	3	119·3
15	12 ,, ...	2	179.
16	2 weeks	1	358·

Table 56.

		1 in
6 months and under	163	2·2
9 ,, ,, ...	2 3	1·7
3, 4, 6, 9 months	179	2·1
6, 9, 12 ,, ...	274	2·
12 months and under	174	1·4
2 years and upwards	54	6·6
3 months and under	61	5·6

[To be continued.]

AN INSTANCE OF REMARKABLE MALFORMATION,

AND

DEFICIENCY OF THE GENITAL ORGANS IN THE FEMALE.

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The following case is one of many of malformation of the genital organs. I am not aware, however, that any case has been recorded in which the deficiency was so complete as in the present, while the general conformation was so perfect.

The subject of the memoir was a fair girl, rather broadly built, in appearance about sixteen years of age, with feminine, though not delicate features. She was brought to the hospital at Vienna, that her sex might be determined.

When four years old, the mons veneris was covered with hair.

I saw her when she was ten years of age. The mammæ were well developed; the voice was soft and girlish; the pelvis was broad; the mons veneris was very thickly covered with hair. Springing from between the labia majora was a large clitoris, with an uncovered glans. In the pendulous condition, the organ was three inches in length and two in circumference; but under excitement, these dimensions were considerably increased. The labia descended laterally, and expanded into folds, resembling a small scrotum in appearance. Half an inch beneath the root of the clitoris, in the median line, was the meatus urinarius, of at least double its usual capacity, admitting a full-sized male catheter without pressure. The vestibule was represented by the space between the clitoris and the orifice of the urethra; but beneath the meatus the rima no longer existed, a depression merely, similar to that which corresponds to the septum scroti, being in its stead.

On examination per rectum, the bladder alone could be felt, without an intermediate organ. Indeed, it was the opinion of all who examined her, that both the vagina and the uterus were absent: even Rokitansky, in general most unwilling to admit the existence of anomalies of this nature, coincided in the opinion now expressed.

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THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

By J. L. MILTON, Esq.

DISLOCATION OF THE CERVICAL VERTEBRÆ.—DEATH.—POST-MORTEM EXAMINATION.

Complete dislocation of the lower cervical vertebræ, unconnected with fracture, may be considered as one of the rarest lesions to which the human frame is subject. An examination of the bones shows the most extraordinary adaptation of matter to a given end; for, though all kinds of motion can be easily attained, yet an excess of movement, as likely to compromise the integrity of the spinal cord, has been so beautifully provided against, as to lead us involuntarily to the belief, that it is only where the neck has been stretched by the most extreme violence, that a pure dislocation can occur; as, either backwards, forwards, or sidewards, it must be accompanied by fracture.

And such, in practice, seems really to be the case. The very existence of this form of dislocation has been doubted by some of the most experienced surgeons. Sir Astley Cooper distinctly states, that he never saw an instance; and, without denying that it could take place, he affirms his conviction, that such cases must be extremely rare. The whole tone of his remarks shows quite plainly that he attributed the belief that they could occur to hasty dissection or inaccurate observation, and firmly believed, that every case, if thoroughly sifted, would have revealed a fracture. Knox examined six cases, "but they were *all* complicated with fracture of some part or other of the vertebræ themselves."

Rare they certainly are; but it is equally certain that they do occur. Dupuytren met with one case; Mr. Liston with one; and the Museum of St. Bartholomew's contains one pure uncomplicated case, in which the cervical vertebræ seem to have been violently pulled asunder. Mr. Samuel Cooper says, in his Dictionary of Surgery—"A gentleman attending my lectures three or four years ago, lent me a specimen of a complete dislocation of the middle cervical vertebræ." Here the accident occurred from the patient's head being violently struck by the top of an archway under which he was riding on an omnibus.

In the following case, for the notes of which we are indebted to the kindness of Mr. Stretton, house-surgeon under Mr. Lloyd, it will be seen that the accident occurred in much the same way.

George Barham, aged 35, was admitted, severely injured, into Coulston Ward, Jan. 12, 1852. He was brought to the surgery on a stretcher, and it was stated that he had met with this accident from having ridden in a cart under an archway much too low to admit him while sitting upright, in consequence of which he was forcibly doubled up.

The symptoms of the case, as seen soon after his admission, are thus given by Mr. Stretton:—The skin cold and clammy; the pulse small and very feeble; the pupils sensible to light; the temperature of the extremities much diminished; and the voice almost inaudible. He complains of great pain at the back of the neck; the upper extremities are partially paralysed, and at intervals his hands and arms involuntarily flap backwards and forwards upon his chest. The skin of the chest is sentient to the tip of the finger, but the intercostal muscles are motionless, and he cannot take a deep breath, or cough. The lower limbs are deprived of both motion and sensation: there is also priapism.

He was moved to bed as gently as possible, placed on his back, and warmly covered up; two grains of calomel were then ordered every four hours. Milk diet and beef-tea were allowed him. In the course of a few hours he seemed somewhat better; the surface became warmer; the pulse was 90, soft and compressible; and he could swallow without difficulty. Neither the bowels nor bladder had been emptied, and a catheter was accordingly passed, by means of which ten ounces of high-coloured urine were drawn off.

On the next day, it was found that he had rested well, and had slept during the greater part of the night; the priapism was also less marked. His pulse was fuller and quicker, having risen to 100. The pain at the back of the neck was now greater, and he wished to have his position changed. There was now complete paralysis of the arms.

Twelve ounces of blood were drawn from the arm, and the same quantity of urine was drawn off. In the evening, the blood, which had been drawn in a shallow vessel, was found buffed. No favourable change had followed, and a slight rattle was heard with the breathing. About twelve ounces of highly ammoniacal urine were drawn off, and the same treatment continued.

When visited, on the second day after the accident, he was perfectly quiet, and stated that he had slept somewhat in the night; there was no other change, except that the priapism was lessened. Eight ounces of urine were drawn off. In the afternoon he was clearly much worse; the breathing was very difficult, and the patient wished a cut to be made in his throat; the bowels had for the first time been relieved, but the motions were dark-coloured, highly offensive, and passed unconsciously. In a short time after he died in a convulsion.

Post-mortem Examination Fifteen Hours after Death.—Slight lividity about the lips and face, and a discharge of dark, bloody fluid from the mouth. On cutting through the structures at the back of the neck, they were found generally infiltrated with bloody serum; blood also was effused between the trachea and spine. The trachea and bronchi contained a large quantity of thick, dark-coloured, bloody fluid, similar to that which issued from the mouth.

The right lung was emphysematous in the upper lobe, and much congested at the back part. Through this lobe, also, small tubercles were scattered; the lower lobe was of a dark bluish colour, infiltrated with serum, hepatized, and sunk in water. The left lung was also emphysematous, and congested in large patches, more particularly at the back part. The heart was generally flabby, and the right auricle contained dark-coloured fluid blood, the other cavities being empty. The intestines were much inflated.

On cleaning the muscular substance from the back part of the spinal column, with a view to its removal, the articulating surfaces on either side of the seventh cervical vertebra were considerably raised above the contiguous vertebræ. Upon removing the cervical with the upper part of the dorsal portion of the spine, the sixth and seventh cervical vertebræ were found separated about an inch, exposing to view the spinal cord. The separation had taken place at the inter-vertebral fibro cartilages, which were left much roughened, and as if forcibly pulled asunder. On opening the spinal canal, the cord was seen much reddened, and in places displayed clots of dark-coloured blood; there was no apparent softening or laceration of the cord or its membranes.

ST. MARY'S HOSPITAL.

By J. G. REED, Esq.

DOUBLE HARE-LIP—WITH FISSURE OF THE JAW.

The increase in the number of operating surgeons, the multiplication of our public medical charities, and the prevalent practice of operating during infancy, render it rather a rare circumstance to meet with hare-lip at the age of puberty in London, and, I believe, in any of our larger towns.

Putting aside the impediment to nursing, and even to feeding, which are inseparable from a simple fissure of a lip, there is no forcible reason why an operation should not be delayed. But when there is complication, with disunion of the bones, the circumstances are different,—for in infancy a most material improvement in execution can be introduced.

The fear that an infant is not strong enough to bear the loss of blood that must ensue in the operation, is ungrounded in the case of those that are healthy. As a rule, when it is determined to operate in very early childhood, the period just before dentition

should be chosen, for the child has then acquired some strength, and the complication of an operation with the trying process of teething is avoided.

The projection of bone, which nearly always exists when the alveolus is cleft, may not only be saved and the teeth belonging to it preserved, but made available to stopping up the gap that usually exists, and improving the form of the mouth of the patient. Gensoul recommended the bending back of the alveolus when a part of it was isolated by a double cleft; but I believe that Mr. Haynes Walton was the first to apply the principle to a projecting alveolus when there was a single division only, by cutting through the jaw parallel to the cleft with bone forceps, and then bending the partially divided piece to the proper level; and his operation was fully described in the *Medical Times* some few years back, and noticed in Braithwaite's Retrospect.

As far as I can ascertain, the common practice, even now, is to cut away whatever protruding bone there may be, that would seem to interfere with the bringing together of the lip.

A lad, aged 14, with double hare-lip, was admitted into St. Mary's Hospital in November, 1851, under Mr. Haynes Walton. On the left side, the bones were fissured, and on the right the lip only. The central piece of skin was much shorter than the portions of lip on each side, a circumstance that demanded peculiar arrangement in operating.

On the 19th of November, Mr. Walton operated on the left side; and I may remark that his usual method of proceeding is to stand behind his patient, and with a small scalpel to transfix the lip, and cut from above downwards, using his fingers instead of forceps, so that a single cut on each side prepares the edges for apposition. But the important particular of the preparation of the edges of the fissure, is his manner of cutting them in the form of an ellipse, so that, when they are pressed together, the edge of the lip is thrown down, and the retiring angle which is so commonly seen after the usual operation, is avoided. Mr. Walton also removes a large bit of the edge, in order to make a long angle.

After the surfaces were prepared, the left side of the lip was freely detached from the bone, so that the skin might be well transferred,—a point which Mr. Walton is very particular to execute thoroughly, for much of the failure in hare-lip cases he conceives owing to this being neglected. Two soft steel pins, with the twisted suture, and two interrupted sutures, were applied, the use of the upper pin being principally to bring the ala of the nose in proper approximation to the septum, and to retain it during the healing process, that this organ might be improved in shape as much as possible. The lower suture was passed through the free edge of the lip to secure accurate union there, and both kinds of sutures were carried through deeply. The projecting point of bone was not touched—it could not be bent back; but it was necessary to extract one of the incisor teeth. The wound healed by adhesion, and in a week the boy left for home. He was re-admitted on December 23, and on the 24th Mr. Walton operated on the other side. To prevent a large notch, which would otherwise have followed from the deficiency of the centre piece, it was so cut that the edges of the lip on each side were brought together below it; it was, in fact, cut to a wedge. The only matter worthy of remark in this second operation is, that the sutures were passed considerably beyond the line of union of the other side. This portion also united by the first intention, and the alteration in the appearance of the mouth is very striking. The new hare-lip bandage, which is a sort of truss with double pads, was not applied, the patient being possessed of determination to keep the muscles of his face unmoved; but in certain cases it is of great service.

There are peculiarities in the cleft of the hard palate in this case, that render the operation for staphyloraphy applicable, and which Mr. Walton intends to perform shortly.

It just occurs to me to mention, as an illustration of hare-lip being sometimes hereditary, that, a few summers ago, Mr. Garlike, of Rickmansworth, sent up to Mr. Walton, the father, the mother, and their three children, with hare-lip. These poor creatures were from among Irish reapers, who had recently come over to England; there were other children of the family who were quite perfect.

Pharmaceutical Chemists.—Leave has been given by the House of Commons, on the motion of Mr. Jacob Bell, for the introduction of a Bill to regulate the qualifications of pharmaceutical chemists. The Bill will be nearly the same as that introduced last year; some amendments having been made to meet certain objections raised against it. We shall watch it well, and give it all the opposition in our power, if, like the last, it trench on the privileges of medical men.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, Feb. 21.—Medical Society of London. *Subject:*—H. Haynes Walton, Esq., "On Nævi and their Treatment." Eight o'Clock.

—— —— Royal Institution. *Subject:*—Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Monday, February 23.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.

Tuesday, February 24.—Royal Medical and Chirurgical Society. Half-past Eight o'Clock.

—— —— Royal Institution. *Subject:*—Professor T. Wharton Jones, "On Animal Physiology." Three o'Clock.

Wednesday, February 25.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.

—— —— Geological Society. *Subject:*—Rev. A. Sedgwick, F.G.S., "On the Classification of the Lower Palæzoic Rocks of Great Britain." Half past Eight o'Clock.

Thursday, February 26.—Royal Institution. *Subject:*—Rev. J. Barlow, M.A., Sec. R.I., "On the Physical Principles of the Steam-Engine." Three o'Clock.

Friday, February 27.—Royal Institution. *Subject:*—Dr. Lyon Playfair. "On Three Important Chemical Discoveries from the Exhibition of 1851 *A.* Mercer's Contraction of Cotton by Alkalies—*B.* Young's Paraffine and Mineral Oil from Coal—*C.* Schrotter's Amorphous Phosphorus." Half-past Eight o'Clock.

Saturday, February 28.—Medical Society of London. Eight o'Clock.

—— —— Royal Institution. *Subject:*—Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Medical Times & Gazette.

SATURDAY, FEBRUARY 21.

SCIENCE AND THE FRANCHISE.

The suggestion, that a learned and scientific man might be as profitably entrusted with the franchise as a 5*l.* householder, and that there might be a better test of education than the possession of a freehold worth 40s. per annum, is one which should not be allowed to drop. Turn it in whatever way we will, the advantages it offers become more obvious. By its adoption we should secure Representatives who would certainly be intelligent, who would probably be independent, who would not be the nominees of great noblemen, nor be swayed by the breath of popular clamour; who would never have spent a shilling in bribery, and would not be very likely to be bribed themselves; who would bring to the House of Commons minds trained to detect sophisms and to appreciate truths, and who would, for the most part, be men of mature years, habituated to the ennobling thoughts which flow from the study of Nature, and accustomed to judge all actions by the lofty standard which becomes the guide of men who spend their lives in contemplating the works of God. That such Members would represent classes and sections is no disadvantage, but a positive gain. The very genius of our Constitution consists in the fact, that it contemplates the assemblage of men of most sections of society, and of all grades of opinion. According to theory, among that Babel of opinion it seeks to appreciate every shade of thought, and from those diverse ingredients to distil the essence, which is the strength of each. How imperfectly this has been done we may at once admit; it is sufficient for our argument to insist upon the

fact, that the Representative Council of the nation is theoretically supposed to contain within itself the opinions of all the intelligent classes, and to number among its Members the guardians of all important interests.

The great organ of public opinion in England, embarrassed with a movement of which it does not quite see the result, dismisses it with a remark, that it is too "*doctrinaire.*" If it were not apparent that this phrase is intended as a reproach, we should have understood it as a compliment. What can be more gratifying to those who have started this suggestion, than to find themselves compared with the great men who stood between the excesses of a Revolution and the ambition of a Court; who bridled democracy and stemmed despotism; for whom Guizot spoke and Royer-Collard thought, and who were the wiser and bolder successors of that noble party who perished, simply because human eloquence could not guide, nor human strength control, that whirlpool of anarchy which crushed in blood the despotism which had brought it forth. But, no; the comparison is altogether fallacious and untrue; there is, thank Heaven, nothing in the state of England that can recal to mind the frightful period when the eloquence of Guadet and of Vergniaud was powerless before the passions of a maddened people, nor that scarcely less eventful time, when Guizot was able to prevent neither the encroachments of an intriguing hierarchy and a deluded king, nor the subsequent democratic recoil of discontented subjects.

The suggestion, that the scientific bodies shall furnish their quantum of legislators, has nothing "*doctrinaire*" about it. It is, in reality, only the development of the spirit of the Constitution. There is in it nothing that is novel or unusual, and, as far as we can see, nothing which is objectionable or impracticable.

As a class, the Medical Profession are particularly interested in this question. We have been virtually unrepresented in Parliament, and our interests have suffered in consequence. If we had had a Representative who could forcibly have expressed to the House of Commons the opinions of the majority of the Profession, how easily would the vexed questions of Medical Reform and Medical Rights have been adjusted. At present, the Government can learn in no way the exact opinions of the practitioners of medicine in the matters which most deeply concern them. Two or three Members in Parliament, returned by the Profession, would be more useful than Colleges which are monopolies, and than a Press whose opinions have been too often also dictated by the influence of a section of a class.

That Lord John Russell's Reform Bill will not pass appears to be the general opinion. If it in part pleases every one, it yet pleases no one enough. It has excited no violent opposition, but it has equally met with no enthusiastic support. It will share the fate probably of many other Whig measures; it will be unsuccessful in their hands, and yet will furnish valuable hints to those who come after them. It will expire without honour, and yet will infuse vitality into its successor. Looking to the interests of the country, we shall not be sorry for its postponement; and, looking to the interests of our class, we cannot but rejoice that more time is allowed for discussion. It requires time for the Medical Profession to perceive the advantage of having recognized Representatives, and to determine to entreat the Government to allot them. The question is a vital one for us, and we shall be rejoiced if more time is given to us to perceive its importance, and to weigh its excellencies and its defects. We shall return to the subject shortly, and shall consider it more in detail.

MEDICAL STATISTICS.

The admirable manner in which the Metropolitan Tables of Mortality are arranged by Dr. Wm. Farr, and the conclusions he has drawn therefrom, respecting the localization of fever and cholera, have long been acknowledged and approved, by sanitarians and the medical public. From out the enormous mass of statistical facts at his disposal, he has evolved a general law with respect to fever, the prevalent disease of the poor, which will prove of immense practical value. He has constructed a death gage—a Necrometer, if we might so term it—upon which the varying powers of the Destroyer, at different altitudes, might be as easily read off as a person marks the different degrees of temperature while running his finger up the divisions of the thermometer.

It is, however, a source of regret to us that here the triumphs of the statist should cease. The discovery of the exact cause, nature, and treatment of disease—the three steps which lead to the temple of health—is the peculiar aim of our Profession. The discovery of the law regulating the proximate cause of the great disease of the poor, as we have stated, is mainly due to the investigations of the Assistant-Registrar-General. What, we ask, have medical men done further towards a comprehensive system of medical statistics? What collection of facts have they brought together, from which any law that is trustworthy can be evolved respecting the nature and treatment of disease? Yet, who can doubt that the want of such a system is of immense detriment to medicine as a science. Who can deny that the configuration of many a disease, which, to the eyes of individual observers, seems dark and doubtful, would come out clear and well defined if looked at from the many points of view, and tested by the many tests which the continuous and systematic analysis of a vast number of cases would afford? It must be evident to all thinking men, that much of the backwardness of the science of Medicine is owing to the fragmentary manner in which its truths have been observed. A practitioner thinks he has a right to propound a theory on the strength of a dozen cases; another, from a scarcely larger number, dogmatises in a completely opposite direction. Both of them have seen a portion of the truth, neither the whole; it is the old story of the knight with the white and black shield. Sometimes even this approximation to truth is not arrived at, and the Profession pauses in astonishment at exhibitions such as that, for instance, which took place a few nights since at the Medical and Chirurgical Society, where a fierce dispute occurred, whether certain appearances so often seen on the os uteri were owing to a loss of epithelium or to ulceration!

Could such disputes have been possible if the Profession were in possession of the annals of disease, in which the symptoms, treatment, and *post-mortem* appearances of an overwhelming number of cases were posted up to the latest moment? Such a tabularised form as we have spoken of would constitute the great open book of the Profession, to which all unsound theories would succumb.

But how form such a statistical table—where are the materials? We answer, in the different hospitals of the metropolis. St. Bartholomew's, St. George's, and St. Mary's, have regularly appointed registrars, who record every fact connected with the patient, either from his admission to his discharge, or to his death and *post-mortem* examination. In all the hospitals there are the books of the clinical clerks and the records of autopsies. Here, then, we have the detached machinery, which only awaits some second Farr to throw it into gear and immediate action. From these sources alone many thousand cases would flow

annually, which would form an admirable nucleus, around which, as the advantage of the undertaking became apparent, the contributions of the different hospitals throughout the country would gradually concrete.

To the two Colleges might be left the responsibility of fixing upon a table - not too intricate nor too meagre; this once decided upon, the labour of filling it up would fall lightly upon the different hospitals, and the returns might be made either to the Colleges themselves, or to the Board of Health.

In the belief that the above idea will be responded to by the Profession, because it promises to supply one of its greatest wants, we shall speedily recur to it again; in the meantime we shall be glad of any suggestions which may occur to the minds of our numerous readers.

THE PROPOSED MILITIA ACT.

Although this may, at first sight, seem a very inappropriate subject for remark in a Journal exclusively devoted to matters medical, nevertheless we offer a few words of advice, which may, perhaps, be useful. The Bill is intended to provide the means of defence in case of invasion, by a sort of civil-military force, to be drilled during twenty-eight days in each year; and, for that purpose, persons between twenty and twenty-three years of age are to be selected. The fatigues of military operations, notwithstanding the advantages of railway conveyance, are very great, and such as none but those who are in the full vigour of health, strength, and manliness, can sustain. The history of former wars will fully support this assertion. The late Emperor of the French drained of its men the country which he governed, and his latest conscripts consisted to a great extent of youths from eighteen to twenty-one years of age. These were soon knocked up, and rendered physically unfit for military duty. In the Peninsula, even our own sturdy men, though inured to hardship, sunk under fatigue, and the line of march was frequently marked by dying and exhausted soldiery. If our Government desire, then, to obtain from the militia its full effect, instead of selecting young men from twenty-one to twenty-three, with strength and power yet to come, they will compose their regiments of *men* in the full flower of life, that is, from twenty-six to thirty years old. The former would soon sink exhausted from fatigue: the latter can endure the labour of actual service.

THE NEW MEDICAL REFORM BILL.

TO THE MEDICAL AND SURGICAL PRACTITIONERS OF ENGLAND AND WALES.

Gentlemen,—Will you, the physicians and surgeons who have contended for several years so earnestly for your own enfranchisement in your respective colleges, give your assent and support to the Draught Bill, entitled a "Bill to produce Uniformity of Medical Education and Qualification," etc., the effect of which will be to withhold from future general practitioners those privileges which you so justly prize as essential to the good government and improvement of the Profession, and so calculated to eradicate those jealousies and dissensions which necessarily spring from the absurd division of the Profession into superior and inferior classes? Impossible! you are too generous, too consistent, to seek to elevate one class by depressing another. And will you, the Licentiates of the Apothecaries' Society, and members of the College of Surgeons subsequent to the Charter of 1843, —you, the unenfranchised ones,—tamely submit to a measure which, by creating a set of little-go practitioners,—mere licensed dealers in medicine, will stamp both you, notwithstanding your permissory title of surgeon, and your successors, as an inferior caste, deemed unworthy of being intrusted even with a vote in the election of the governing body of a single medical or surgical institution? Your numbers, your talents, and the high estimation in which you are held by all ranks in society, give you a commanding influence. Use that influence for the public good and for the maintenance of your own respectability; oppose this invidious class legislation, this grade-making Bill, with that unwearied energy which has characterized all your past proceedings, and which the consciousness of right inspires. Battle for the right, and the right will triumph. Rely upon it, the House of Commons will support you, if your claims are founded in justice. Throughout all the textures of English reform, we trace the silver thread of the representative privilege twined round the golden cord of Conservatism, and thus giving strength, beauty, and durability to the fabric; and shall not these principles, which have ever distinguished British legislation, be applied to the reform of medical as well as of other institutions? Why should the Apothecaries' Society, which, though not in name, is in reality, a medical college, be submerged merely to augment the power of the College of Physicians? Has the Apothecaries' Society ever betrayed its trust? On the contrary, has it not done more to improve the medical practitioner than all the other medical institutions together? And shall we be so ungrateful as to aid in undermining an Institution which has been our greatest benefactor? We did not seek to destroy the College of Surgeons because the Council had injured us by the unjust Charter of 1843, and proclaimed us fit only "for the ordinary exigencies of surgical ministration." No; we chose a more honourable course—one which we believed would be more conducive to the welfare of the public and the Profession. We endeavoured, by reforming, to preserve and strengthen this time-honoured institution, with which, with all its faults, it was our pride to be connected. We could not forget that, as a College of Surgery, it had acquired, long anterior to the creation of the fellowship, a celebrity which was recognised in every quarter of the globe,—a celebrity gained, too, by the talents, energy, and good conduct of its members of that very class which the Council attempted to repudiate. The remembrance that all our best institutions had been slow in attaining to perfection, taught us patience and self-control. We would not cut down the tree which had stood for so many years, because its recent growth had not been so rapid or satisfactory as we wished. And I must do the Council the justice to say, that they met us in a spirit of conciliation which was highly honourable to them. They have thrown down the barrier which had so long excluded from the governing body all who resided beyond the small and magic circle drawn by the hand of exclusiveness around St. Paul's. When the tree of English surgery was first planted, the space allotted for its roots was doubtless sufficient for its early growth; but could we wonder that, after the lapse of so many years, with its accumulated branches, laden, if not, as in other countries, with honours, yet with the fruits of science, so vast a tree, with roots so circumscribed, should have begun to totter, and its trunk to exhibit marks of premature decay? Like the banyan tree, its branches are sending forth roots to act as pillars of support to the parent stem, and thus prevent its otherwise inevitable fall.

Let us render the same service to the Apothecaries' Society. Let us urge them to apply to Parliament for a new Act of Incorporation on such a liberal representative plan as will secure the approbation and support of the medical and surgical practitioners of England and Wales.

With the College of Physicians we are not in any way connected; they have never taken a part in the examination of the class to which we belong. We seek not to injure them, nor to interfere with their privileges,—on the contrary, we rejoice in their increasing prosperity, we rejoice to observe that they appreciate so highly that representative principle for which we are contending. We congratulate them on the success which has attended their efforts to widen the representative basis of their own College, and we trust they will do all they can to further our enfranchisement in the Apothecaries' Society under the denomination of a College of Medical Practitioners. We shall remain, as heretofore, practitioners of medicine, together with surgery and midwifery; they, physicians, or consulting practitioners of medicine only; consequently, there need not exist any jealousy or conflicting interests between us. The number of medical bodies empowered to grant degrees may be needlessly numerous, but why, therefore, abolish that institution which

has discharged its duties best, as thousands of medical men now practising under the licence of the Apothecaries' Society can testify? Why have an examining board appointed by a Council responsible only to Colleges over which the licentiates so examined will exercise no control, and who, consequently, will have no guarantee that the standard of education selected for their class will be higher than what may be deemed necessary to fit them for "ordinary exigencies,"—such a standard, in short, as will not supersede the necessity of frequent consultations with those of a superior grade, as by law established. But if, on the contrary, it be contended, that the proposed licentiate will be a highly-finished practitioner, why, then, refuse him a vote in the Colleges of Physicians and Surgeons? Distinctions, I admit, there ever must and will be; but those distinctions should be founded on public services, on literary merit, or scientific discoveries, and not upon legislative enactments, artificially arranging the Profession in classes, and having no reference to individual worth. Any measure of medical reform which we seek to obtain should be simple, practical, and just, conservative of existing institutions whose value has been tried and acknowledged, and which, by a judicious system of reform, may be easily adapted to the requirements of the present day. The Colleges of Physicians and Surgeons having been practically reformed by their respective members, let us concentrate all our energy, all our influence, steadily and with singleness of purpose, on one point,—viz., the re-modelling of the Apothecaries' Society on a representative basis. I subjoin a plan for your consideration; but, ere I conclude, I beg to remark, that, although the Draught Bill of the Provincial Medical and Surgical Association, if adopted by the Legislature, would be prospective only in its effects, exempting very properly from degradation the existing race of practitioners, it is still no less our duty, in all our proceedings, to regard the interest and respectability of our successors, whose position we should endeavour to render superior to our own. We seek for corporate privileges, not merely for the love of power, but to secure for all classes of medical and surgical practitioners a respectable position, and that high standard of education, preliminary and professional, which will qualify them for every emergency, and thus impart efficiency and value to their services, and true dignity to the Profession of which they are members.

I am, &c. W. P. Brookes.

Much-Wenlock.

[Want of space compelled us to postpone the insertion of this address last week; but in the report of the meeting of the Branch Association of the Provincial Medical and Surgical Association, we gave the proposal for a reform of the Apothecaries' Company, which Mr. Brookes advocates instead of the Bill framed by the Council of the Association. Mr. Brookes' proposals were rejected by the meeting, and approval given to the principles of the Bill.—Ed. *Med. Times and Gazette.*]

REVIEWS.

A Practical Treatise on the Use of the Microscope, including the Different Methods of Preparing and Examining Animal, Vegetable, and Mineral Structures. By John Quekett, Assistant Conservator of the Museum, and Demonstrator of Minute Anatomy at the Royal College of Surgeons of England. Second Edition. London. Baillière. 1852. Pp. 575

The demand for a second edition of a special work on a distinct department of science, demonstrates alike the value of the work itself, the direction of many minds to the subject of which it treats, and the estimation in which both author and subject are held. The microscope, an instrument developing to us the *microcosm* of our globe, is to the physiologist what the telescope, bringing within our ken the far distant worlds or *macrocosm* of the universe, is to the astronomer. The microscope has since its origin undergone numerous modifications and such improvements, that, from the magnifying power of 170 diameters—the highest power possessed by Leeuwenhoeck—it is now capable of magnifying not less than 2000 diameters.

Like all other means of research by which the observer is enabled to perceive more than can be brought within the limits of our unaided senses, the microscope has been alternately the subject of lavish praise and bitter vituperation; but every succeeding year attests the value of the practical and theoretical results obtained by its assistance. The versatile but persevering Leeuwenhoeck, and the philosophical Malpighi, with some less celebrated followers, had, to a great extent, exhausted the field first opened by the ordinary microscope; and it was not until the instrument had been rendered achromatic, by the labours of our countrymen, Tulley and Lister, that we were enabled to study the minute structure of the animal and vegetable kingdoms with effect. Hence histological research, in its higher signification, has been the growth of the present century.

The extensive employment of the microscope has led to the appearance of a number of works on the subject, of which the treatise now under notice is not only the latest, but also by far the most complete and practical. It is divided into three parts: the first devoted to the mechanical arrangements of the instrument; the second, to its use; and the third, to manipulation.

The first part commences with a history of the microscope, and the numerous changes in form and arrangement of its parts. This history forms the introduction to the first chapter, in which we have a description of the numerous forms of simple microscopes, from the common pocket lens to the dissecting microscope, the doublet, and triplet.

The second chapter is devoted to a description of the numerous recent forms of the compound microscope adopted by the existing makers.

The third chapter is, perhaps, one of the most important, especially to the young observer, in the whole volume, since it treats of the accessory instruments, or necessary appendages to the instrument:—the diaphragm; the achromatic condenser, originally invented by Dr. Wollaston, and subsequently modified and improved by Dujardin, Nobert Amici, Gillett, Wenham, and others; the polarising apparatus, by which a further insight is given into the molecular constitution of bodies; the condensing lens; the erecting eye-piece, by the aid of which the object is seen in its natural position; the compressorium; the camera lucida; and a number of other less important accessaries.

The fourth chapter is occupied with descriptions of the best forms of lamps employed for illumination; and the fifth and concluding chapter of this part embraces the description and illustration of the theory of simple, compound, and achromatic lenses.

The second part of the volume is occupied with directions for the use of the microscope, commencing with general directions, followed by a chapter on the different methods of viewing transparent and opaque objects by ordinary, reflected, and transmitted light, by direct light, by the condenser, by the lieberkuhn, and the several modern accessory instruments of Amici. Shadbolt, Wenham, and Gillet, concluding with some excellent advice to microscopists.

The succeeding chapter illustrates the several methods of measuring the actual diameters of minute objects. To so high a perfection has the micrometer been brought, that lines have been drawn on glass at intervals of not less than 1-80,000th of an inch apart.

In the fifth chapter, the method of employing the camera lucida is described. The sixth is occupied with the polarization of light. The seventh and concluding chapter is devoted to the goniometer, adapted by Dr. Leeson to the microscope for measuring the angles of minute crystals.

The third and concluding part is devoted to microscopic manipulation, by which must be understood the preparing of objects for present examination, and the different modes adopted for preserving, or, as it is technically termed, mounting them for future reference. An elaborate description of this part of the subject may be naturally expected from our author, who has for many years been in the constant practice of mounting specimens; who has, in fact, formed the magnificent collection contained in the Museum of the College of Surgeons; and such, indeed, we find in the volume before us.

The contents of this part are multifarious in the extreme. The diamond for cutting glass, and the methods of using it; the making of cells for microscopic objects; the cements employed for that purpose; the preservative fluids, and the modes of mounting objects in them; the mounting of objects in Canada balsam; the various plans for mounting opaque objects; the section of bones, teeth, wood, etc. etc.; the minute dissection of vegetable and animal tissues, with the instruments employed; the best methods of seeing the circulation of the blood or of the juices of plants; those for procuring and exhibiting animalcules; the examination of morbid structures; with copious lists of the most interesting objects, so selected as to give the best examples of modifications of structure, are among the more important contents of this part. All

these miscellaneous but important subjects are described in plain and graphic language.

We conclude this analysis by expressing our sincere thanks to Mr. Quekett for the large store of valuable practical information he has accumulated for the benefit of the scientific world, and for the numerous additions and improvements observable throughout this second edition of his volume.

Medicina Mechanica; or, the Theory and Practice of Active and Passive Exercises and Manipulations: considered as a Branch of Therapeutics, and as adapted both to the Treatment and Cure of many Forms of Chronic Disease. By John W. T. Blundell, M.D. 8vo. Pp. 292. London: J. Churchill. 1852.

Of the value of exercise in maintaining health, and of its use as a curative agent in certain diseases, there cannot be two opinions; the importance of a judicious regulation of the amount and kind of exercise to be employed in particular cases is equally indisputable. This book is intended as a guide for the employment of certain forms of exercise, and contains an account of the particular movements to be made in various diseases; appended are cases illustrative of the benefit to be derived from the systematic use of these movements.

"This branch of therapeutics," Dr. Blundell says, "comprises a system of motions and mechanical applications adapted to diseased conditions of the human body, and with reference to the physiological and anatomical bearings of such derangement. It is also governed by the rule,—that if exercise be absolute to the maintenance of health, specific exercises, among other forms of treatment, are especially needed to restore a normal action to parts, and subsequently to the whole organism."

The following is a specimen of the cases given by our author to illustrate the value of the Medicina Mechanica:—

"*Case* 17.—Hypertrophy, or enlargement of the heart.

"Mr. J. S., aged 37, had long suffered from constitutional debility. The more recent symptoms had been languor, anxiety of mind, sudden starts in bed, accompanied with violent struggles, as if against some impending danger; costiveness, palpitations, and the usual signs of deranged circulation.

Treatment.—The operator commenced with vibrations to the epigastrium and chest percussion in the upright posture, which were succeeded by vibrations of the same in the recumbent position, the patient at intervals raising himself by putting in action the recti muscles of the abdomen. "In the last position, also, rotations of the femur were used, and the tourniquet applied to the arms and legs."

Space will not permit us to follow Dr. Blundell's description of the various exercises, active and passive, of the abductors, adductors, and extensors; nor to explain what is meant by vibration and percussion. "The result," he goes on to say, "proved the perfect success of mechanical treatment in such diseases."

In fact, in a few weeks the patient was cured. Comments are unnecessary; a patient cured in a few weeks of hypertrophy of the heart by vibrations, percussions, and rotations of the femur. Surely this beats Prince Hohenloe.

Dr. Blundell's book, we ought to add, is addressed to the public as well as to the Profession.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM JOURNALS.

THE BLOOD OF THE SPLENIC VEIN.

We gave last week an account of the microscopic examination by Dr. Otto Funke, of splenic venous blood. Although not a selection from a journal article, it may not be uninteresting to abstract the latest observations of Kölliker on the same point. The blood of the splenic vein differs, according to Kölliker, from ordinary venous blood, in the deeper colour of its serum, in the great number of colourless blood-corpuscles, in the nature of the coloured elements, and in the presence of blood-corpuscles-holding cells, and of their derivatives.

The deeper colour of the serum appears to depend either on a great amount, or on a particular condition, of the pigment. The great number of colourless blood-corpuscles, as noted originally by Kölliker, in the blood of dogs, can be observed in many animals. It appears to Kölliker premature to assert with Funke, that the white metamorphose into red corpuscles. If it is certain that some lymph globules form red blood corpuscles, yet all lymph globules do not do so, and it is equally certain that all white corpuscles found in the blood do not run through this transition. On the contrary, the large many-nucleated pus-like cells, do not change into red blood corpuscles, but are connected with the solution of these, and it may be the same with these colourless cells of the splenic venous blood. The origin of these white cells is not clear; they may be nothing else but the elements of the spleen pulp passing into the blood.

Kölliker has not, like Funke, observed any constant peculiarity in the red corpuscles; they vary in size, and are often not decolorized by water, and some of them, as Funke observes, are not affected by acetic acid.

In certain peculiar blood corpuscles, crystals are occasionally seen (*Cyclopædia of Anatomy and Physiology*, art. Spleen, p. 792, where two woodcuts are given of them as seen in the hepatic and splenic blood of a dog.) The crystals are rod-shaped, yellowish, unaffected by water, but disappear in acetic acid. In the spleen-pulp of the barbel (barbus fluviatilis) Kölliker found a great number of free spindle-shaped or needle-formed crystals. Funke's observations are alluded to, but no examination appears to have been made by Kölliker himself, as to the effect of water on the splenic venous blood of the horse.

Kölliker also observed blood-corpuscles-holding cells (more constantly, apparently, than Funke) and the coloured and colourless granular (Körnchen) cells, which are derived from them.—*Microscopische Anatomie.*—Vol. II., Part 2, p. 279.

PARALBUMEN AND METALBUMEN.

Under the above title, Scherer has lately described two modifications of albumen, which he detected in the fluid of an ovarian dropsy. The paralbumen precipitates with nitric and hydrochloric acid as usual, but the chief character in which it differs from ordinary albumen, is the solubility in water of the precipitate thrown down by alcohol. In this it resembles the albumen of the pancreatic fluid, as noted by Bernard; the paralbumen also forms a turbid solution, not cleared by filtering, when heated with acetic acid, whereas ordinary albumen precipitates completely, and is left on the filter. It differs from casein, in not being thrown down by acetic acid in the cold; the elementary constitution of this body has not been made out.

The metalbumen was found in a viscous, almost gelatinous, liquid, from an ovarian cyst. Digested in water, part dissolved, part was sedimentous. In the solution, nitric acid produced a whitish-yellow precipitate, insoluble in excess of acid, and after a time the fluid became gelatinous. Acetic acid did not cause any precipitate, and herein it differed from paralbumen. Alcohol precipitated it; the precipitate, as in the case of paralbumen, dissolved in water, and in this solution nitric acid produced no precipitate, but made the fluid gelatinous. Scherer inquires whether this metalbumen may not be a transition form from albumen to mucus or colloid substance.—*Verhandlungen der Phys. Med. Gesellschaft in Würzburg.*—Vol. II., p. 214 and 278.

GELATINOUS SUBSTANCE IN SHEATHS OF TENDONS, AND IN INTERVERTEBRAL CARTILAGES.

An examination by Virchow of the jelly-like substance found in the sheaths of tendons, has made known several new points. The substance had at first a strong alkaline re-action, (which afterwards disappeared,) and consisted of an organic matter, and of soluble and insoluble salts. Microscopic elements failed in it.

Digested in water, it dissolved. Neither acetic nor nitric acid, nor alcohol, nor tincture of galls, pyroligneous acid, chromic acid, corrosive sublimate, nor sulphate of copper, produced the least change in this solution. It would have been supposed that no organic substance was in solution, had it not been for two tests. One of these was Millon's solution for albuminous substances (viz., the acid nitrate, and nitrite of mercury) which gave the usual red colour; and the other was acetate of lead, which gave a copious precipitate, soluble in acetic acid. This organic substance from the sheaths of tendons, agrees almost entirely with that found in the early periods of life in the intervertebral substance, and approaches, Virchow thinks, to the colloid substance examined by Mülder, and to mucus, as described by Tilanus.—*Verhand. der Phys. Med. Gesellschaft in Würzburg.*—Vol. II., p. 281.

MAGUEY, OR AGAVE AMERICANA, A REMEDY FOR SCORBUTUS.

Dr. Glover Perrin, U. S. A., has recorded his observations on the use of this plant in scurvy. While stationed at Fort M'Intosh, Texas, several soldiers of the regiment to which he was attached

were attacked with scurvy. Some were put, as usual, upon the use of lemon-juice, others upon citric acid, which treatment was continued for several days with few (if any) signs of improvement. Being informed by the curate of the town that he had once suffered from an attack in his own person, and had been cured by the use of domestic remedies, among which was the maguey, Dr. Perrin determined to make trial of the expressed juice of this plant. A few days after its administration was begun, a decided amendment was observed, and all were soon relieved. The countenance, he says, so universally dejected and despairing in the patients affected with scurvy, is brightened up by contentment and hope in two days from the time of its introduction, and there was marked evidence of improvement at each successive visit. Dr. Perrin consequently places the maguey far above lime-juice as a remedy in this disease. The plant grows indigenous in most parts of Texas, and, he was informed, of New Mexico and California. It grows in a sandy soil, and contains a large amount of vegetable and saccharine matter, and is of itself sufficiently nutritious to sustain a patient for days. The manner in which it is used is as follows:—The leaves are cut off close to the root; they are placed in hot ashes until thoroughly cooked, when they are removed, and the juice expressed from them. The expressed juice is then strained, and may be used thus or may be sweetened. It may be given in the dose of two to three ounces three times daily.—*New York Journal of Medicine.* 1851.

SALT IN INTERMITTENT FEVER.

This substance was proposed some time ago, by Dr. Piorry, of Paris, as a remedy in intermittent fever, in evidence of the utility of which a large number of cases were adduced by him. He administers it in doses of two tablespoonsful once or twice daily; and asserts, that it not only promptly arrests the paroxysms, but also exerts on the spleen as marked an influence as quinine does.

Professor Herrick, of Rush Medical College, has reported in the September number of the *N. W. Medical and Surgical Journal* the results of several trials made with it, which go to corroborate the success obtained by M. Piorry. Professor Herrick suggests, that it acts by preventing the destruction of the blood globules, (which takes place to a considerable extent in this disease,) and, at the same time, by furnishing the materials for the manufacture of a fresh supply of this constituent.

He prescribes it in the dose of three to four drachms twice daily in mucilage. After the fever is checked, he gives it in smaller doses, say ten grains, with the same quantity of carb. ferri, twice or three times daily, as a tonic and corrective of the secretions of the alimentary tube.—*Charleston Medical Journal.* 1851.

GENERAL CORRESPONDENCE.

THE PLEA OF INSANITY.

[To the Editor of the Medical Times and Gazette.]

Sir,—The very general approval which has been expressed in numerous journals, political and literary, as well as legal and medical, of the views which I have ventured to put forth in my "Remarks on the Plea of Insanity," etc., seems to justify the conclusion, that they in the main coincide with the opinions and experience of the majority of those who have directed their attention to the subject; and I am now pleased to find, that my friend Dr. Bucknill does not differ with me so much as I was at first led to suppose on reading in his pamphlet the observations made on the opinions which I had expressed in the work already alluded to. It seems, then, that we are quite agreed as to the expediency of establishing a State asylum, and I believe that opinion is now nearly unanimous among those who are in any way officially connected with hospitals and asylums for the insane. There appears, however, to be still some difference between us as to who should occupy this State asylum, yet, if I understand Dr. Bucknill aright, this difference is by no means so great as it appears. Of insane persons tried for the commission of offences, Dr. Bucknill proposes to make two classes—"First, offenders entirely through the operation of their disease and the neglect of their guardians; and, second, persons of imbecile or partially unsound mind, and of criminal disposition." For the first of these two classes he fully recognizes the principle of granting them "the enjoyment of all the comforts and luxuries their position and circumstances would allow." Here, again, then, we are quite agreed. It is only those who commit an offence under the distinct influence of insanity, whose claim to acquittal on that ground should be entertained; and, if this is admitted, I conceive it to be unjust that those individuals should be treated as criminals, and believe that the principle is sound and politic which would permit a difference to be made in dealing with them during their detention according to their previous position in society and pecuniary means. In Dr. Bucknill's letter, published in your Journal for February 7, I find the following paragraph:—"Dr. Wood proposes, that a State asylum for criminal lunatics should afford superior accommodation for such as can afford to pay for it, and wishes to assimilate such asylum to the Queen's Prison, where a wealthy debtor could have his day-leave, his tiger, and his tilbury, while the poor debtor languished in misery, want, and strict imprisonment." Dr. Bucknill admits, that those who have committed offences entirely through the operation of their disease and the neglect of their guardians, are innocent, and should be permitted to enjoy all the comforts and luxuries their position and circumstances would allow. Well, then, this is all I contended for. The fact of many of this class not having the same means is no reason, even according to Dr. Bucknill's view of the matter, why those who have should not be permitted to enjoy them in the same manner, but under certain restrictions, as those who have not forfeited their liberty. There is no more reason for anticipating in such an asylum the growth of intractable pride in the one case, and embittered feelings in the other, than in those asylums which now receive patients from the different ranks of society, and treat them according to their respective means. As it is, however, a very bitter feeling is engendered among those who are degraded by compulsory association with individuals in every way their inferiors. But, that my views may not be misinterpreted, let me crave your indulgence while I quote the passage referred to, and which applies to those who have committed offences under the distinct influence of insanity:—"There seems no reason why patients of this class should not be allowed, within certain limits, to live in the State asylum according to their means, on somewhat the same principle as those confined for offences not criminal in the Queen's Prison. There is something quite inconsistent with our notions of humanity and justice in a system which compels an unfortunate gentleman to associate with the very outcasts of society; and yet, if an individual, whatever his rank and station in the world, whatever his high moral character and intellectual attainments, should unhappily become the victim of insanity, and in a furious paroxysm of maniacal excitement, inflict some fatal injury on another, the law recognises no real distinction between him and a convicted felon, whose whole career has been one of depravity, vice, and infamy. It cannot be supposed, that the supervention of insanity in the case of such a lawless outcast can have done anything towards purifying a being so fallen; and yet one might almost suppose this to be the case, when we find him placed in all respects on an equal footing with those whose only crime has been the result of an affliction over which they have had no control, but which, it may be, they have exerted their utmost energy to avert." Surely there is nothing in this quotation that Dr. Bucknill would not himself subscribe to, nor anything which would lead to the conclusion that I advocated, on the one hand, such unreasonable indulgencies as the "day-leave, the tiger, and the tilbury," for the wealthy offender,—these things being nowhere permitted, but being, even in the case of the Queen's Prison, altogether imaginary luxuries,—or, on the other hand, such heartless cruelty as misery, want, and strict imprisonment to the poorer, but equally innocent individual, of the same unfortunate class. I am sure Dr. Bucknill is too humane to speak lightly of the misfortunes of those who, in the inscrutable decrees of Providence, are afflicted with this dreadful malady, and too generous to wish either by ridicule or exaggeration to get rid of an argument in favour of these unhappy beings, because it is opposed to what he believes to be the right view of the matter. We are quite agreed upon the main principle involved, viz., the justice of allowing all reasonable indulgence to those who were really insane when they committed their offences, and I think every impartial person must sympathise with and admit the justice of this view. But, of insane persons tried for the commission of offences, Dr. Bucknill makes a second class, viz., persons of imbecile or partially unsound mind, and of criminal disposition, and for these he thinks a Government asylum should be established; but, in their treatment, he would not permit any social distinction, and would subject them to a humane, but corrective discipline, that their characters might be reformed. It appears to me, that the attempt to make any such distinction must necessarily fail, nor can I admit the justice of treating so differently two insane persons who have committed the same offence, but whose malady has varied in its symptoms, in the one being attended with greater violence and disposition to mischief than in the other. It is a well established fact, that many persons, who by nature are kind and gentle, become, under the influence of insanity, malicious, revengeful, and violent: in fact, "criminally disposed;" and that others, who have been brought up with the

greatest care, and have hitherto conducted themselves with uniform discretion, modesty, and propriety, become, under the influence of insanity, cunning, mischievous, filthy, and obscene. The alteration of character, then, which individuals so frequently undergo on the occurrence of insanity, makes it impossible to adopt such a classification as that proposed, and the practice would, I conceive, be fraught with injustice, which would treat persons tried for the commission of the same offences as innocent or culpable according to what appeared to be the subsequent amount of criminal disposition in each. The fact of their having actually committed crime, surely argues the existence of criminal disposition in both, and what is really, in many cases, the accidental circumstance of some continuing for a longer time than others to manifest a criminal disposition is, I submit, no ground at all for treating some with all the comforts and luxuries their position and circumstances will allow, and not only denying these advantages to others, but prohibiting, in their case, all social distinction, and submitting them to a humane, but corrective discipline, that their characters may be reformed.

As to the kind of classification which would be desirable in a State asylum, I take it for granted, that in every asylum in the country an attempt is made, as far as the means for carrying it out can be obtained, to classify the patients according to their mental peculiarities, and I can hardly suppose it possible that this very sound and universally admitted principle would be rejected in a State asylum; but this is quite consistent with such further classification as is necessary to separate what Dr. Bucknill calls subgenera of "nobility, gentility, respectability, and vulgarity."

One word more, and I have done. In your review of my "Remarks on the Plea of Insanity," &c., it is said, "Dr. Wood's definition of insanity is so extensive, that almost every prisoner might be defended on this ground." If he were, he would not the less surely be convicted. "I totally repudiate the doctrine, that an insane person is necessarily irresponsible;" and not less decidedly do I maintain, that "here are those who, with a certain amount of mental infirmity are yet able to control their actions, and guard against the commission of crime, and I conceive that it is a doctrine likely to lead to disastrous consequences, which holds, that any amount of mental disturbance may be admitted as an excuse for any amount of crime."—I am, &c.

Wm. Wood, M.D.,
Licentiate of the Royal College of Physicians.
Bethlem Hospital.

DYSMENORRHŒA.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the leading article of your Journal for February, 7, you justly reprobate the very improper use of the speculume in the treatment of uterine diseases, adopted by some physicians. You also correctly state, "that ulcerations of the os uteri are very rare," and thus denounce the erroneous assertion, that this disease is of every day occurrence, and remove the only plea upon which these improper practices could with any show of propriety be continued. But, while you lend your powerful support to the suppression of such abominations, alike uncalled for by the nature of the disease, and demoralising to the female subjected to them without just cause, you admit a series of articles on "Dysmenorrhœa," signed by the time-honoured name (in midwifery) of "Edward Rigby, M.D.," which are scarcely less mischievous in their tendency than the statements and practices so justly condemned. A short analysis of the papers referred to will convey my meaning.

On the 25th of October, 1851, a paper appears in which the subject of dysmenorrhœa is divided under two heads—*mechanical* and *functional;* and under the former head, it is said, "come these numerous cases where the catamenial secretion takes place naturally, but where, from the contracted or closed state of the os uteri or canal of the cervix, the fluid is discharged from the uterine cavity with much difficulty and suffering, or is altogether obstructed. The chief feature is, that pain precedes the discharge," which varies in different individuals, sometimes coming on only a few hours before, and sometimes for days or even a week; the patient being warned of its approach, in the latter case, by a sense of weight and distension in the pelvis, with feeling of discomfort, occasionally producing frequent desire to relieve the bladder, and pain on evacuating the rectum. Sympathetic derangements subsequently occur. The treatment recommended consists in "attending to the general health, and in effecting the necessary degree of dilatation of the os and cervix uteri as shall remove the obstruction which has hitherto existed to the discharge of the catamenia;" the dilatation being effected by a dilator, "the blades being made of well-tempered steel;" by sponge tents, "so that the finger may even pass into the uterine cavity;" by "metallic tents of different sizes," and, when requisite, "by dividing the contracted portion by the *histoire cachée*"—uterotome.

In a few words, then, there are numerous cases of dysmenorrhœa, wherein the chief feature is pain for only a few hours before the appearance of the catamenia, and which require for their treatment the forcible dilatation of the orifice of the uterus, or the division of this part by a cutting instrument. There is no exception made in this treatment, whether the female be married or not married; and, in fact, that it is intended to be alike applied to both, is shown by one of the reported cases occurring in an unmarried lady,—Miss B., Dec. 6. Hence, a young virgin female who suffers from pain "only for a few hours" before the appearance of the catamenia, is to have her person exposed, her delicacy violated, her uterus forcibly dilated by "blades made of well-tempered steel," or slit open with a knife ingeniously contrived for the purpose. Was there ever a more monstrous proposition put forth in sober earnestness? It is quite unnecessary to point out the various affections of the uterus,—such as congestion, slight inflammation, etc.; or of the vagina,—as congestion, catarrhal inflammation, etc.; or of the ovaries, which may, each or all of them, cause the very symptoms mentioned, and yet pass away by appropriate general treatment. Nay, a loaded condition of the large intestine, or a nervous system naturally susceptible to slight impressions, will also cause these same symptoms, without there being any morbid condition of the uterus itself. These latter cases, however, appear to be unworthy of notice,—be there but present "pain for only a few hours" before the menstrual discharge, the blades of well-tempered steel, or the ingeniously-contrived knife, are to be put in requisition.

I think I hear a voice whispering, "There are cases given." Here is the first:—"Mrs. D—, aged 36; married several years; never pregnant; tall, gaunt, pale; complains of general debility, and considerable gastric derangement; has always suffered severely at the catamenial periods; the pain preceding the discharge for three or four days, attended with abdominal distension and great depression of mind; latterly the periods have been very profuse; os uteri internum nearly closed. I dilated it slightly, and some catamenial fluid escaped." Certainly it is not overloaded with detail, but what is meant by "considerable gastric derangement?" Is there only one form of derangement?—and is it unnecessary to show, by the form present, that it depended on the uterine affection? She "always suffered severely at the catamenial periods." What was the character of the pain? Where was it situated? Did it occur suddenly, or come on gradually? These and other details are requisite to form any idea as to whether the inference which is drawn be correct or not. "Latterly the periods have been very profuse." Indeed; and this with an obstruction at the orifice. How did the "very profuse" discharge escape with an "os uteri internum nearly closed?" But was this nearly closed? How was this ascertained? What instrument was employed to determine it? And, lastly, "I dilated it slightly, and some catamenial fluid escaped." Again, by what instrument was this slightly dilated; and how was it ascertained that catamenial fluid escaped? By the colour? But is Dr. Rigby not aware that a coloured discharge will always escape when "blades of well-tempered steel" are introduced into the uterus as far as the "os uteri internum"? Is this a matter of so trivial a nature that it is not requisite to point out the means by which the one discharge may be distinguished from the other? Such appears to be the opinion of Dr. Rigby, as no data are given by which it can be determined. Thus, not only are the details so few as to render the case unfit for any illustration, but those given are so loosely worded as to mean absolutely nothing.

I fear that this communication may be too long, considering the numerous applications for space in your valuable journal; but the following case (Dec. 6) is well worthy of a notice:—"Miss B., aged 36, has always suffered severely at the menstrual periods, the pain obliging her to remain in bed. The catamenia of late have become irregular and too frequent. Says she has had a constant discharge, tinged with red, for the last ten months. The uterine sound passed more than two and a half inches. I dilated the os slightly, and some brownish, bloody-coloured fluid came away." The same objections could be urged to the details, in this case, as to those in the former, were it necessary to repeat them. But the new point worthy of note is, "the uterine sound passed more than two and a half inches." To have passed so far, it must have penetrated the os uteri internum, and, as it is surmounted by a bulb which measures from a quarter to half an inch in diameter, this bulb must have passed through the orifices of the uterus. Now, in the healthy condition, these orifices are not so large as to admit an instrument of this size to pass, and hence, according to Dr.

Rigby's report, those parts were morbidly enlarged, not contracted. The escape of "some brownish, bloody-coloured fluid" would, as already stated, follow the introduction of the sound, and no facts are given to show that it was catamenial fluid.

I am, &c. M.D. Londin.

MEANS OF APPLYING NITRATE OF SILVER IN SOLUTION TO THE URETHRA.

[To the Editor of the Medical Times and Gazette.]

Sir,—I perceive in your Journal of Feb. 14, a letter from Mr. Henry Smith, in which he lays claim to be the original inventor of an instrument "of very similar construction" to one described by me in the *Lancet* of Jan. 24, for the purpose of applying nitrate of silver in solution to the urethra in spermatorrhœa. Will you allow me to make a few remarks, as briefly as possible, in reference to the question between us.

I was, until I received a call from Mr. Matthews and a communication from Mr. Smith, perfectly unaware of the existence of any instrument of the kind, or that the idea had been entertained by any one besides myself. Had there been any notice of such an one in any journal, or in the published records of any Society whatever, I think I should not have been ignorant of it.

Mr. Coxeter, also, my instrument-maker, had never heard of it. It was the first inquiry I made when I carried my drawing to him, containing the original conception, which has since been exactly carried out in every detail, as there designed by myself.

Consequently, if injustice has been done to Mr. Smith, it has been most unwittingly on my part, and I am quite willing to state here, that there can be no doubt that his idea was practically embodied at an earlier period than my own. The dissimilarity of those ideas, however, will appear.

But I must contend, in justice to myself, that, both in design and construction, the instruments in question considerably differ, although, in external appearance, they are so much alike. Mr. Smith's was intended, on his own showing, to "carry fluid to any part of the urethra in some forms of gonorrhœa and gleet." Mr. Lee appears to have applied it to spermatorrhœa. Mine was made expressly for a case of the latter kind, to carry out views which I entertain respecting the unnecessary severity of the crude caustic; and I may be permitted, in passing, to express my gratification at learning that the correctness of those views has been so well exemplified in the practice of that gentleman, more especially since, on the ground of my own experience alone, I have been the first to publish and advocate them. The distinguishing marks between Mr. Smith's instrument and mine are these:—His is a catheter, containing a stilette, upon which an indefinite quantity of sponge is bound; mine is constructed on the principle of a syringe, being a canula with a closely-fitting piston, below which a vacant space is left, and which, when charged, contains a few minims of the solution; next comes a small piece of sponge, not more than an inch in length, rivetted between two plates of metal, so that only a fixed quantity of fluid can be taken up. The smaller the sponge, the larger will be the measure of fluid conveyed; while, in Mr. Smith's, the converse holds good,—for the sponge being the only medium of applying it, its quantity will bear a corresponding relation to the size of that sponge. Again, the latter instrument is open to the objection, that, for want of any piston accurately adapted to the canula, the movements of the sponge are uncertain, and the mucous membrane of the urethra is very apt to be caught between it and the edge of the canula during its withdrawal.

I may further add, since I have Mr. Smith's permission to do so, that he does not hesitate to consider my instrument more complete and better adapted to answer the end for which it was designed; and I think that an examination of the two, side by side, would elicit a similar opinion from any one.

Trusting I may not have encroached too far upon your valuable space, I am, &c. Henry Thompson.

16, Wimpole-street, Cavendish-square.

MEDICAL ETHICS.

[To the Editor of the Medical Times and Gazette.]

Sir,—As the principal public medico-legal authority whom I can consult, I shall feel obliged by your favouring me with your opinion upon the following rule of professional conduct, which, upon good professional authority, I have been informed prevails among several of my professional brethren in Manchester; and being anxious in all matters to conform to the laws of my country, as well as scrupulously to avoid deviating in the slightest degree from the most rigid system of professional etiquette, I confess myself at a loss to know how I am to regulate my conduct for the future. The opinion I allude to is, "that in the event of a medical man being called upon to visit a patient dying from the effects of poison, if he finds that poison has been administered by another medical man,—whether through ignorance, neglect, or mistake,—it is the duty of the medical man so called upon, to endeavour in every way to prevent inquiry by the Coroner as to the cause of death;" in fact, "if my legal adviser has correctly informed me," to render himself liable to indictment for concealment of felony? I will mention what has been stated to me upon equally good authority, viz., first, that in the case of alleged poisoning by opium, published in your Journal of the 17th, there were no symptoms of poisoning by opium; secondly, that they, "the medical men expressing this opinion," had frequently seen children die from dysentery, diarrhœa, etc., with similar symptoms. With reference to this last assertion, I should like very much to know whether opium formed any part of the treatment in these cases?

Your insertion of this letter and reply to my inquiries in the next number of your Journal will greatly oblige

Yours, &c. Alfred Carr, M.D.,
Formerly Resident Physician to the Haningham Lunatic Asylum, and late Surgeon-Superintendent of Emigrants H.M.S.

Rusholme, Manchester.

[We have omitted parts of Dr. Carr's letter because they bear on matters which are of no interest to the Profession at large, and therefore unsuited to our pages. The answer to the question propounded by Dr. Carr must evidently turn on the meaning attached to the words "poison, ignorance, neglect, or mistake." If one medical man, after a due exercise of his judgment, prescribes a drug which another medical man subsequently conceives has caused the death of the patient, we do not think, as a rule, that it is the duty of the latter to demand an inquest. For example, some medical men maintain, that opium in any form and in any dose, is lethal in phthisis and in cholera. If these gentlemen demanded an inquest on every case they thought had been killed by their brethren, we fear that coroners would be troubled to meet all the demands on their time.—Ed. *Med. Times and Gazette.*]

THE SPECULUM QUESTION.

[To the Editor of the Medical Times and Gazette.]

Sir,—My mind has been much relieved on reading your leader referring to the last meeting of the Royal Medical and Chirurgical Society; for I believe the views and opinions there expressed are calculated to lead the Profession generally towards a correct estimate of those writers and practitioners who have made the speculum an instrument for "daily and hourly" exercise.

There is one passage, however, in your article, on which, perhaps, you will allow me to remark, as it tends rather to shirk a responsibility which the editor of a medical journal ought to take from the shoulders of the country practitioner.

Let me tell you, Sir, we have a battle to fight with husbands and fathers, and the zeal we show and the energy we exercise in endeavouring to stem the fashionable current of thought and action to the speculum doctors, are misconstrued either into jealousy or ignorance. We want, therefore, your independent pen to aid us, and your enlightened judgment to direct us, into a proper course of action.

The questions which naturally arise after a little calm reflection upon the points at issue between the disputants, are of a nature which the general practitioner, in nine cases out of ten, is not in a position to solve, more especially after the angry and personal character of the discussion of last Tuesday week.

The questions are—

1st. Are congestion and inflammation of the mucous membrane of the os and cervix uteri as frequent as they are stated to be?

2nd. Do these conditions of the part require for their treatment the application of caustic remedies?

3rd. Is the abrasion of epithelium, spoken of by Dr. Henry Bennett, to be really regarded as a form of ulceration, which he asserts it to be?

4th. Supposing it to be so, does this abrasion require cauterization for its cure?

Having stated these questions for your impartial consideration, I unhesitatingly affirm, that a distinct and straightforward reply to them cannot fail to be the source of an untold amount of good, and also a means of preventing the unnecessary extension of a very serious evil; for, Sir, we have it on the authority of Dr. Murphy, that women, in the proportion of 1 to 3, require examination with the speculum, and, as a consequence, treatment with the cautery.(a) If this be true, the married state becomes a curse rather than a blessing. Weeks, months, and years of intermitting inspection and cauterisation of a part which Nature hides with discretion and protects with care, is an anomaly almost too monstrous for belief; but if men once imbibe this notion, that a very large proportion of the female sex suffer from uterine disease, another evil of a secondary kind will rapidly follow upon the first; for men will naturally avoid the married state if that state is to bring with it, as I have known in some instances, not only the personal annoyance of a very early inspection and treatment of the os uteri, but a fearful expense in addition. We have said nothing of the invasion of the modesty and secrecy which, God forbid, should ever be wrested from the bosom of the British women as a mass; for collectively they are a pattern in these respects to the world. They know that they are admired and respected for their modesty, and they value it accordingly. Let it not then be said, when too late, that the frequent use of the speculum has done much towards the diminution of the regard for the modesty of the women of England.

In concluding my remarks, Sir, by again calling upon you to exercise your editorial functions to the utmost extent of their legitimate operations in the present crisis, allow me to quote the opinions of the editor of the *Times* on the duties of a journalist, which, with the substitution of the word "physic-craft" for "state-craft," are applicable in all their force to the editors of Medical Journals: "The duty of the journalist is the same as that of the historian—to seek truth above all things, and to present to his readers, not such things as 'physic-craft' would wish them to know, but the truth, as near as he can attain to it."

For the honour, both of the Profession and of humanity, this question demands a speedy settlement. I am, &c.

INQUISITOR.

P.S. The practice of wiping the os and cervix uteri with lint, previously to an accurate decision as to the nature of a case, which I understand is an ordinary procedure, might account for abrasion of the epithelium in some instances.

EFFECTS OF STRAMONIUM.

[To the Editor of the Medical Times and Gazette.]

SIR,—Perhaps the following case may be interesting to your readers, and we shall feel obliged by its insertion in your valuable Journal.

On Friday evening, the 6th instant, a lady called upon us and complained of headache, dryness of the throat and fauces, faintness, difficulty in walking, languor, and impairment of vision—the pupils being greatly dilated. These symptoms (together with her statement, that three other persons had been similarly affected soon after partaking of tea—one of them so seriously as to oblige her to go home) led to a suspicion that some poisonous matter had been taken. On minute inquiry, we discovered that three tablespoonsful of stramonium seeds (incautiously left in the tea-caddy) had been put into the teapot by mistake.

In three of the cases the symptoms abated upon the use of emetics and stimulants, followed by tonics for a few days. The other patient suffered more severely with contraction of the muscles, swelling of the hands and feet, etc., and required longer treatment, but we lost sight of her after the first night, as she was under the care of a neighbouring practitioner. We are, &c.

GOULD AND THURSTON, Surgeons.

19, Kingsland-crescent.

(a) *Medical Times and Gazette*, Feb. 7th, 1852, p. 111, col. 2, line 11.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. LATHAM, President, in the Chair.

THE President stated, that Dr. Bentley, who had taken so active a part in the early establishment of the Society, as almost to be considered its principal founder, but who, from ill-health, had been rendered unable to attend the meetings of the Society for the last two years, was recommended by the Council for election as an honorary member of the Society.

Nine members were elected, and certificates in favour of four candidates were read.

Dr. Ogle presented a specimen of

GENERAL SOFTENING OF THE BRAIN, WITH ABSCESS IN THE LEFT CEREBRAL HEMISPHERE, IN CONNEXION WITH CARIES OF THE TEMPORAL BONE.

There was found a carious state of the petrous element of the left temporal bone, a portion of the anterior surface being entirely wanting; and there was also great vascularity, with porosity and softening of the part entering into the formation of the lateral sinus, as well as of the mastoid portion externally, and the parietes of the external auditory canal. The membrana tympani was destroyed, and purulent fluid existed in the inner ear. There was considerable adhesion of the dura mater to the calvaria generally, and, corresponding with the ulcerated petrous portion, this membrane was also ulcerated, the margins of the ulcerated part being thickened and dark, and firmly adherent to the bone. The vessels of the pia mater were, for the most part, so congested, as to give at first the idea that extravasation had occurred. On examining the brain, it was found to be generally softened, but more especially as regards the left hemisphere and the parietes of the lateral ventricles, which contained much purulent fluid, and had their septum broken down. In the anterior and inferior part of the left softened hemisphere was an abscess of about the size of a small orange, with definite and moderately firm parietes containing healthy-looking pus. This had doubtless been in close relation with the diseased bone, as, on insinuating the fingers between it and the bone, the abscess burst, and much purulent fluid welled out into the cranial cavity. The cerebellum was healthy, as well as the medulla oblongata. The patient from whom the specimen was taken was admitted into St. George's Hospital, suffering from bronchitic and rheumatic symptoms, as well as a slight discharge from the ear. He was made an out-patient in about four weeks' time, simply suffering from the discharge. He had not been out of the house above twenty-four hours when he had great pain "all over the body," and fell down in a "fit." He was insensible for several hours, and was re-admitted as an in-patient in a partly unconscious condition. He became very sleepy, and incoherent in his expressions. His pulse was very feeble, and he gradually lost his intellectual powers, but never became delirious nor complained of pain. He sank gradually, and, about eight days after the "fit," he died in a semi-comatose condition. No indications of a general scrofulous or other specific diathesis were observed.

Dr. Ogle described also,

AN EXAMPLE OF A SINGLE KIDNEY BEING FOUND IN THE BODY.

The kidney was found on the left side of the body, and was about twice the weight and size of an ordinary one. It had its own supra-renal capsule; and nothing, on microscopic examination, was found in it worthy of note, excepting slight alteration in the contents of the uriniferous tubes. On the side where the kidney was missing there was, contrary to expectation, a "should-be" supra-renal capsule, and a ureter also, though to what connected could not be ascertained, as it had been inadvertently divided during the *post-mortem* examination, before the peculiarity in question was noted. It had not been in connexion with the existing kidney nor with either capsule. There are but four or five such instances mentioned in the St. George's Hospital *post-mortem* records.

Dr. W. Jenner presented an example of

MALFORMATION OF THE PULMONARY SEMILUNAR VALVES.

This heart was removed from an adult female. It offers an example of the second form of malformation from excess of development, as described by Dr. Peacock, in his report lately presented to the Society. Four semilunar valves are seated at the orifice of the pulmonary artery; the circumference of the artery measures $3\frac{1}{8}$ inches. Three of the four valves measure one inch each along their free margin; the fourth, placed between two of the larger, measures only one-eighth of an inch. The small, or supplementary valve, resembles the others in all particulars but size; its base is crescentic; and at the centre of its free margin is a corpus Arantii. There are no communications between the pouch of this valve and those of the neighbouring valves. There is no opacity or other disease of the valve, excepting some reticulation; and the heart and other valves are healthy.

Dr. Jenner also presented a specimen of

CANCER OF THE POSTERIOR MEDIASTINUM.

This specimen was removed by Dr. Jenner from a patient of Dr.

Garrod's. During life, the man had suffered from symptoms indicating the existence of extensive effusion into the cavity of the left pleura. A trocar was introduced two days before death, for the purpose of affording temporary relief, but no fluid escaped. After death, the pleura was found divided into at least two compartments, by old false membranes. The topmost contained a large amount of limpid serosity: that into which the trocar had entered, a quantity of grumous fluid, too tenacious to pass through a trocar. Altogether the pleura contained about two quarts of fluid. The growth exhibited occupied the posterior mediastinum, and passed into the root of the lung. The aorta at one place was surrounded by it, but the calibre of the vessel was not diminished. The left pulmonary artery was surrounded by cancerous matter, and its capacity greatly lessened; the pulmonary vein reduced to a mere chink; the lung was solid, greatly compressed, and so rotten, that it broke down with the greatest facility. The left bronchus was infiltrated with cancerous matter, and it was impervious. The growth offered a very good specimen of what Müller termed carcinoma reticulare. There was a transparent greyish base, on which might be seen opaque whitish dots and streaks. The consistence of the growth varied somewhat; towards the root of the lung it was much softer than elsewhere; the softer the growth, the greater the proportion of the opaque white portion. The greyish transparent part consisted of delicate fibres and large nucleated cells, the opaque white part of large corpuscles, filled with granules, chiefly fat. In a few of these granular cells a nucleus was dimly seen.

Dr. J. Risdon Bennett exhibited

TWO SPECIMENS OF CYSTIC OXIDE CALCULI.

They were taken from the kidneys of a woman, of whose history but little was known. In early life she was said to have passed a small calculus from the bladder. She subsequently became insane, and was for some time in confinement. After leaving the asylum she became intemperate in her habits, and though suffering in various ways from general derangement of health, was not known to have had any symptoms specially referrible to the urinary organs. She died without any dropsical symptoms or cerebral affection. Both kidneys were enlarged, and their pelves much distended, from the impaction of calculous matter, and especially from the presence of two calculi,—one in each kidney, of considerable size. These calculi were surrounded by coagulated blood, and were of an irregular figure, being moulded to the shape of the distended infundibula of the kidney. The larger one measured two inches in length, and rather more than one in breadth at its larger extremity; its weight was 204 grains. Of a very irregular form; it closely resembled a piece of crystallised ginger, having a yellow smooth waxy appearance externally, and a crystalline character internally. The surface of one of its nodules was whiter in colour, smooth, and polished, apparently from friction. The smaller calculus was of a similar irregular form, but differed considerably in its general aspect. It measured 1½ inch in length, and ¾ inch in breadth, and weighed 116 grains. Its external surface, blackened by dried blood, was rough and channelled, and presented the general appearance of being worm-eaten; it was of much less density than the larger one. It had, however, the same crystalline structure. Both calculi, on analysis, appeared to consist of pure cystic oxide. Specimens prepared for the microscope, by Mr. Rainey, of St. Thomas's Hospital, were also exhibited by Dr. Bennett, and displayed very beautifully the characteristic crystals of cystic oxide.

The President inquired if there were not a remarkable difference in weight between the two calculi?

Dr. Bennett replied in the affirmative, and that there was also a number of smaller calculi which had not been preserved; they were as fine as gravel.

Dr. C. J. B. Williams asked Dr. Bennett whether it had been ascertained that both the calculi, which differed in appearance, were the cystic oxide, and also what was the state of the liver?

Dr. Bennett answered the first question in the affirmative, but was unable to answer the second.

Dr. Heale wished to know whether there were any evidence of the presence of malignant disease in the case?

Dr Bennett had not seen the patient himself, but he thought he should have heard, if such had been the case.

MEDICAL SOCIETY OF LONDON.

Dr. Murphy, President, in the Chair.

FIVE CALCULI REMOVED BY LITHOTOMY, EACH CONTAINING A FIELD BEAN FOR ITS NUCLEUS.

Mr. Haynes Walton exhibited some calculi, containing beans that were taken from the bladder of a man by the operation of lithotomy, by Dr. R. Mackenzie, of the Royal Infirmary of Edinburgh. David Smeaton, a labourer from the county of Kinross, aged 46, was admitted under Dr. Mackenzie into the hospital, September 17, 1851, suffering from the usual symptoms of vesical calculus, which had been more or less urgent for six months previously. The lateral operation was performed on the 13th of October, and five stones were removed. The prismatic shape and uniform size of the calculi were remarked at the time as being curious, but the presence of a foreign body as a nucleus was not suspected till some days afterwards, when the stones and their nuclei having been deprived of their moisture by evaporation, it was accidentally discovered that one of them rattled. The history of the origin of his symptoms was very imperfectly obtained at the time of his admission into the hospital, but on a more strict investigation after his recovery from the operation, the following account was obtained:—About the end of March of the present year, after a carousal with two fellow-labourers, with whom he lodged in a barn attached to his master's farm, a quarrel arose, in which he was knocked down and overpowered by his two companions. From the injuries he received, and his state of intoxication, he was rendered insensible, and, while he was in this condition, the following cruel trick was perpetrated on him by his assailants:—He was stripped of his clothes, and a quantity of beans (the common field, or horse-beans, used for feeding cattle) were thrust into his mouth, and into the rectum, and several were introduced into his urethra. The manner in which these found their way into the bladder is unknown; but it is probable that several were introduced, one after another, into the orifice of the urethra, and then pushed back along the canal by pressure of the fingers on the penis and perinæum. On the following morning he was found in a state of insensibility, with his genitals covered with blood. His companions had made off, and have ever since escaped detection. A number of beans were vomited, and passed per anum on the day following the assault, and during this and the subsequent day, he suffered great pain in voiding his urine, which was mixed with blood, and contained several fragments of broken beans. He was confined to bed for several days, but at the end of a week he had nearly recovered from his injuries, and his urinary symptoms had considerably abated in severity. The patient made a speedy recovery, and left the hospital in perfect health on the 27th November, the wound having been quite healed for ten days previously to his dismissal.

Dr. Camps then directed the attention of the meeting to a case presenting

THE CO-EXISTENCE OF VARIOLA AND VACCINIA, WHICH TERMINATED FATALLY, IN AN INFANT SIX MONTHS OLD.

This was recorded in a late report of the Registrar-General, wherein it is stated, that it occurred in the East sub-district of Islington, the medical attendant certifying as follows:—"This case exhibited the co-existence of variola and vaccinia. Two members of the same family having an attack of small-pox, and this infant being unprotected, it was subjected to vaccination, which pursued its usual course up to maturation of the vesicle, when confluent small-pox set in, and terminated fatally in eight days after its appearance." Dr. Camps drew attention to this case on account of its very infrequent occurrence; others who had had the advantage of more experience than himself in these zymotic diseases, state that they have seen such instances of the co-existence of variola and vaccinia, but he never had witnessed them. He thought such cases were more favourable to the opinion, that variola and vaccinia were varieties or modifications of the same disease, than to the opinion, that they were totally distinct, independent, and antagonistic disorders.

COILING OF THE CORD.

Mr. Streeter, in reference to his remarks at the last meeting on the normal and morbid effects produced by the natural coiling of the funis, exhibited a preparation where the fœtus had been constricted by the funis round the abdomen. He also showed a drawing of the knot on the funis, and of five cases in which the entanglement of the fœtus in folds of the coil had produced its death. These were taken from Wallace, Johnson, William Hunter, and preparations from cases occurring in the practice of himself and a friend.

Dr. Murphy inquired of Mr. Streeter, whether he had ever observed the amputation of limbs in utero, described by Dr. Montgomery? He himself had never met with an example of that accident.

Mr. Streeter had never seen such a case, but he believed there was one recorded in the *Medical and Physical Journal*, in which a foot was absolutely cut off. He then asked the President, if he had frequently met with cases of knots in the cord? He (Mr.

Strecter) had encountered it once only in his own practice; another example of it had been shown him by a professional friend.

Dr. Murphy replied, that it was not of frequent occurrence in his practice.

OSSIFICATION OF THE RETINA, LENS, AND CORNEA. (a)

Mr. Canton brought before the Fellows of the Society a beautiful specimen of complete ossification of the retina and capsule of the lens which he had removed after death from the eye of an elderly man. An accident had, many years previously, destroyed the sight, and the eyeball, by degrees, had become atrophied. Calcareous matter had been deposited in the cornea at the site of the injury, by which vision was lost; and the specimen was shown which demonstrated this point. Mr. Canton stated, that this so-called ossification of the retina he believed to be a deposit of the bone-salts exterior to this membrane, and that the retina itself underwent absorption in consequence of the pressure thus exerted upon it. Though similar instances had been recorded, the extent of the deposit in this case might be regarded as rare.

Dr. Wagstaff read a paper

ON TOPICAL MEDICATION IN THE TREATMENT OF DISEASES OF THE PHARYNGO-LARYNGEAL MEMBRANE.

After remarking upon the value of topical medication in the treatment of many local affections of the mucous membrane, he gave a history of the introduction of the plan of treating diseases of the pharyngo-laryngeal membrane by local applications by Sir Charles Bell, in 1816, and of its adoption by many physicians, awarding to Dr. Horace Green, of New York, the merit of having furnished to the Profession irrefragable proof of the harmlessness and efficacy of this therapeutic measure. But, while he thus accorded to Dr. Green great praise for the energy and talent which he has displayed in the development of this important branch of practice, his experience obliged him to state, that he could not agree with the assertion made by Dr. Green, of the facility of introducing a sponge-pointed probang through the rima glottidis into the trachea, and down even to its bifurcation. After several years' experience in the use of this remedial measure, he (Dr. Wagstaff) had arrived at the positive conclusion, that an instrument cannot be passed with facility, and without danger, below the rima glottidis. But he was equally decided in the opinion, that a practised and skilful manipulator will seldom find a case in which he will be unable, after a suitable education of the parts, to pass the sponge-armed probang into the cavity of the larynx down to the chordæ vocales. He thought that much of the opposition that existed against this valuable plan of treatment had arisen from the assertion of the ease which attends the passage of an instrument to the bifurcation of the bronchia, and also from the exaggerated claims for its almost universal efficacy and applicability. Dr. Wagstaff then exhibited the instruments which he employs for effecting an entrance into the larynx. These, he said, varied but slightly from those used by Dr. Horace Green, and consisted of a bent spatula fixed in a handle, slightly concave on the under surface, so as to conform somewhat to the convexity of the tongue, and a whalebone probang variously curved to suit the different conformations of the mouth, to the end of which a small rounded piece of fine sponge is firmly attached. By pressing the tongue firmly down and drawing it forward from its base with the spatula, the laryngeal surface of the epiglottis may be exposed; when this organ is in view, its posterior face being insensitive to touch, it may be used as a guide for the introduction of the sponge into the larynx. Dr. Wagstaff also exhibited an instrument for introducing powders into the larynx and trachea—the process of insufflation. He has found a combination of nitrate of silver with sugar, in the proportion of one part of the former to six of the latter, triturated to an impalpable powder, a useful application in some chronic alterations of the mucous membrane of the trachea and bronchia. He applies the crystallised nitrate of silver dissolved in water, in strengths varying from 20 to 80 grains to the ounce. In passing the sponge into the back of the mouth, much care should be taken to avoid contact with the pillars or the pharynx, as the moment these are touched a more or less violent retching action is produced, by which the larynx is elevated to contact with the epiglottis, and thus the possibility of entering it is for a time entirely precluded. He observed, that, in the short space of time allotted to the reading of a paper, it would be impossible to give a detailed account of the various affections in which he had found topical medication with a solution of nitrate of silver efficacious; he would, therefore, confine himself to a brief statement of the diseases, and the manner in which the application might, in his opinion, be employed with the greatest prospect of success. He then gave an account of the method in which he employs these topical medications, and their value, in acute and chronic catarrhal affections of the pharyngo-laryngeal membrane, and the organic alterations which result from these, as well as from acute and chronic inflammations of this organ; also of its use in those various forms of chronic laryngeal disease which have been usually spoken of as one affection, termed "clergyman's sore throat." He likewise remarked upon its use in laryngismus stridulus, hooping-cough, and true membranaceous croup.

Dr. Cotton believed that there were some present who looked upon the operation described by Dr. Wagstaff as one which it was impossible to perform. He thought so himself formerly; but, last summer, Dr. Horace Green, of New York, being in England, showed them the proceeding at the Hospital for Consumption, at Brompton; and it was, certainly, most simple and easy of performance, when the operator had once got in the way of doing it. The spatula exhibited was that used by Dr. Horace Green, and he had himself employed it for some time; but it had a very formidable look, and, the handle being troublesome in use, he (Dr. Cotton) had had one made by Coxeter, which was smaller altogether, one end, however, being larger, for operating on adults, the other smaller, for children. There was one thing which rendered this operation easy,—the epiglottis was not sensitive on its under surface. He had practised it twice that day; had touched the epiglottis with the probang, which he had afterwards seen enter the glottis. The operation may not always succeed the first time it is attempted, as some patients are more irritable than others, the tongue may be thicker, etc. The cases at the Hospital for Consumption, in which this proceeding is called for, are those of laryngeal phthisis, and in them it is very useful. Hawkers, again, often lose their voice from shouting in the streets; he had tried many remedies for this in vain; had even dusted the pharynx with powdered nitrate of silver, but without success. He had at last employed the probang with this solution, introducing it into the larynx, and, in five or six cases, with great advantage, the voice being nearly recovered. He had also used it in nervous and hysterical cases, and in the early stages of phthisical laryngitis, when disease in the lungs is not far advanced. When the lungs are much disorganised, the proceeding is inadmissible.

Mr. Hird inquired of Dr. Cotton to what extent down the trachea he passed the probang.

Dr. Cotton replied, that that was a point he had neglected to allude to. Dr. Wagstaff had intimated, that, in general, he would not pass it below the chordæ vocales. He (Dr. Cotton) did not think it necessary or useful to exceed that distance, as the spasm that occurred in passing the rima glottidis would squeeze the sponge, and the liquid would trickle down. There would be then no advantage in passing the instrument lower down; but, nevertheless, it can be done, as he (Dr. Cotton) had seen Dr. Horace Green pass it down to the bifurcation of the trachea, as he (Dr. Green) had said he could. He saw him pass in the instrument up to its handle; and he felt certain it went into the trachea, and not into the œsophagus. He thought, however, that in some cases such a proceeding might be attended with danger.

Dr. Halley said, that a man had been admitted into University College Hospital with a cut throat, and Mr. Marshall was sent for. He (Mr. Marshall) thought this a good opportunity for trying the possibility of passing a probang into the trachea, which he experienced very great difficulty in effecting, but he did at last succeed in the attempt. Although he used every precaution, it almost invariably passed into the œsophagus. He (Dr. Halley) did not know any particular reason for the difficulty in performing this operation, unless it be the great difficulty in passing an instrument through the glottis, which he had himself found it far from being easy to effect.

Mr. Harding said, that the anatomy of the parts would tend to show that the operation was not difficult of performance, and he supposed that the presumed difficulty must be regarded as connected with the irritation the passage of an instrument into those parts would be looked upon as likely to excite. He had himself unfortunately had disease of the larynx, and could therefore speak practically. He could readily pass an instrument into his own larynx; he had done it,—not once or twice, but fifty times at least,—and, from his own experience, he concluded that the operation does not cause the anticipated irritation. He could easily pass his finger into the larynx, and he did

(a) Rather more than twenty years ago, a man, thirty years of age, was admitted into the Westminster Hospital under Mr. Guthrie, with perfect amaurosis affecting both eyes. Health generally good. All other remedies failing to afford relief, the long issue in the calvarium was practised and kept open some little time. Erysipelas, however, set in, and terminated fatally. At the *post mortem* examination it was ascertained that both the retinæ were in a nearly perfect state of ossification. As Mr. Canton spoke of his case as being somewhat rare, we have deemed it right to place on record this recollection of our dressership.—*Rep.*

not think that a piece of sponge passed into it would induce greater irritation. He could keep it there for a quarter of a minute at a time. Contrary to Dr. Wagstaff's statement, that the closure of the rima squeezed out the contents of the sponge, he himself had never experienced the spasm. The operation is of easy performance; he had performed it often on patients, and on himself. It can be practised on children without danger by means of the fingers alone. If the patient push forward the tongue, the epiglottis can almost always be seen, after which, if the tongue be pressed down, a properly made instrument can be passed into the glottis, with almost greater facility than into the œsophagus itself. Dr. Cotton had said, that the probang had been passed as far as the bifurcation of the trachea; he would not deny this, but he thought that few would succeed in effecting it. It was very difficult to get the instrument beyond the chordæ vocales. The pain caused by the nitrate of silver is comparatively slight; he had used for himself a solution of one drachm to one ounce, and it did not cause much annoyance. He was opposed to its use in hooping-cough, which was a disease generally unattended with danger. He thought, that when there was not any urgent necessity for it, this plan of treating disease ought not to be used in such cases, as it may cause mischief, and may leave the larynx weak for life.

Dr. Cotton remarked, that there was one observation he wished to make respecting the irritation this application might induce. It of course differed in different persons; but he had never seen it cause any dangerous spasm. He was in the habit of never passing it into the larynx on the first occasion, but of applying it on the top at first, letting a little of the fluid drop into the air-passages, so as to accustom them to its stimulus. He had seen one case in which the operation, performed by a person unaccustomed to it, was productive of danger. The patient fell down insensible, and was thought to be dying. His life was saved with difficulty. He (Dr. Cotton) had seen some degree of hæmoptysis follow a violent fit of coughing caused by its application in a phthisical case; but it rarely causes injury, and its benefits are so marked, that patients almost always ask for its repetition.

Mr. Hird said, the discussion embraced two or three points: the first, as to the use of topical applications to the mucous membrane of the throat; the second, the means of so doing to the pharyngeal and laryngeal mucous membrane; and, thirdly, the propriety of this application in the early stages of inflammation. With regard to the first of these, there could be no doubt as to the value of these applications to diseased mucous membranes, whether of the throat, the termination of the alimentary canal, or of the urethra. The author has used it in diphtheritic affections of the throat with very great success; and Dr. Cotton speaks of its use in hysterical females who have lost their voice. On that point he (Mr. Hird) knew nothing, but should like to learn more. With reference to the means of applying such things, he had some experience, and he did not agree with the author in his estimate; there was not that amount of difficulty in using these applications, he (Dr. Wagstaff) seemed to think. It was never necessary to pass the probang below the rima glottidis; and he could not credit Dr. H. Green's statement that he had passed it down to the bifurcation of the trachea. The probang that was used was not long enough to reach it. Any difficulty that might exist in passing the probang depended mainly on the instrument used to control the tongue, which cannot be managed so readily as with the fingers. The instrument used by Dr. Green will merely depress the tongue, and not draw it forwards, and may cause irritation of the isthmus faucium. He (Mr. Hird) had repeatedly used applications to this part, applying the sponge with facility; it is not often necessary to use it inside the glottis. By drawing the tongue forwards the epiglottis can be seen, and then with a small sponge, grasped with a pair of forceps, a little of the solution may be squeezed over and into the larynx. It is not often that dangerous symptoms follow, but, if a little more fluid than is requisite be dropped in, some unpleasant symptoms may arise, but they soon pass away. Then comes the question as to the application of this topical remedy before inflammatory action has reached its climax; experience, more especially as regards diseases of the eye, shows that solutions of the nitrate of silver may be used advantageously before the climax has been attained. Mr. Hird then explained the occurrence of local inflammation, as the arrest of the blood corpuscles in the vessels, which, by the application of a stimulus, are forced onwards, the circulation being restored. The disease is thus cured on sound physiological principles. He should not, therefore, hesitate to employ the topical stimulus at an early stage of inflammation.

Dr. Cotton explained, with respect to the remark he had made regarding the hysterical loss of voice, that it constituted a set of cases in which much benefit could not be expected to result from medication. He gave the fact without attempting to offer an explanation. If he were called upon to do so, he should say, that the parts, being long disused, fall into atony, and require the stimulus to rouse them to action. He did not give this as the explanation: he was satisfied with the fact, that relief had been thus given.

Mr. Dendy coincided with those who spoke of the facility with which the operation was performed. Although he had not practised this operation, he had often applied the stick caustic to the parts, and had done so that very day in a case of enlarged tonsils. He could apply it with ease to every part of the fauces. There was no spasm, nor any sign of irritation. With respect to hysterical females, it must be remembered, that they are of the leucophlegmatic temperament, and generally possessed of a very relaxed fibre. The nitrate of silver is not so much a stimulant as a most powerful astringent; it acts, in fact, as a caustic, and constringes the parts greatly. He had no doubt that, in applying the caustic to his patient that day, he had touched the very edge of the thyroid cartilage. The experiment on the cut-throat was a very different question; the sensibility of the epiglottis was affected, and thus the operation was materially interfered with.

Dr. Handfield Jones gave an account of the supply of nerves to the parts concerned. He remarked that the back of the fauces is supplied by the glosso-pharyngeal, the excitor nerve of the par vagum; hence irritation of the glottis gave rise to spasm. The under surface of the glottis and the arytænoid mucous membrane was supplied by the superior pharyngeal, the excitor nerve of the inferior laryngeal, which supplied the muscles of the larynx; so that these parts, when stimulated, contracted and squeezed the sponge. He concluded his remarks by offering some objections to Mr. Hird's theory of inflammation.

Mr. Hird having explained,

Mr. Harvey expressed himself as being gratified with Dr. Wagstaff's paper, but he would have been better pleased if the author had worked out a case in full detail, in illustration of his views, so that the real effects of the local and constitutional treatment adopted by him in such cases might be recognised. When Dr. Horace Green's book was first published, he (Mr. Harvey) gave it a full and careful perusal and study, but he was not satisfied that the benefits said to result from the local application of the nitrate of silver would really be experienced. He would wish to ask Dr. Wagstaff if, in the cases of which he had written, he had found that the purely local treatment he recommended was always sufficient to effect a cure, and also whether any—and if any, what—dangerous, or even unpleasant symptoms, had ensued from its use. He would also ask whether, when extensive follicular disease of the throat existed, he had noticed the occurrence of singing or noises in the ears—tinnitus aurium—and deafness, from the extension of the diseased action along the Eustachian tube to the cavity of the tympanum? He himself doubted much whether mere local treatment could be sufficient to eradicate the diseased condition of the membrane, as he anticipated that remedies acting on the constitution, such as tonics, etc., would be requisite, as follicular disease generally occurred in persons who are anæmic, or are already far advanced in cachexia.

Mr. J. B. Brown spoke of Dr. Wagstaff's paper, as being eminently practical—a step in the right direction. He had had lately a case of clonic spasm in a child two years old, for which he had on two or three occasions used this application with a camel's hair-brush, giving aperients only internally, and recommending out-of-door exercise. There were only two or three attacks of spasm subsequently—of laryngysmus stridulus—the last a week ago, and the child is now quite well. He believed, that if, in the commencement of scarlet fever, a strong solution of argenti nitras be applied to the throat, no ulceration of that part will follow. In a case of chronic laryngitis, which occurred two years ago, a few applications of a solution of this salt to the larynx caused the disappearance of all the symptoms. He suggested that all such cases should be recorded, as thus a large mass of valuable information would be obtained.

Dr. Camps thought the difficulty in operating was a mere question of habit. He had had a case under his own care, where it was necessary to apply the solution to the back of the throat, low down; the difficulty disappeared as time slipped away. His own practice fully supported Dr. Wagstaff's views.

Mr. Hancock remarked, that the credit of this operation had been given to Dr. Horace Green, of New York. He wished to state that Mr. Bishop, a Fellow of the Society, ten years ago, had read a paper on the subject at one of their meetings, in which he recommended this practice. (Hear, hear.)

Mr. Richardson inquired if there were any results dependent on the degree of expansion of the lungs in the performance of this operation?

The President asked whether the application had ever arrested the progress of croup?

A Member suggested that the greatest difficulty in practising this operation would be found with children.

Dr. Wagstaff, in reply, expressed his gratification at the reception his paper had met with, and then answered categorically the several objections. He thought the spatula he used preferable to Dr. Cotton's, as the handle was more out of the way, and better than the fingers, as they served to fill up the buccal cavity. He expressed a doubt of the passage of the probang as far as the bifurcation; considered the cut-throat case as not bearing upon the question; had not seen any cases where the instrument could be retained any time, as expulsive efforts were soon made to get rid of it. He had found the process useful in hooping-cough, when employed continuously, not otherwise. In hysterical females, the loss of voice is connected with uterine derangement; when that has been cured, a few applications would restore the voice. He did not know how it acted. The constitutional symptoms must, of course, be met by systemic treatment; had not met with tinnitus aurium, but deafness, as a result of the extension of the follicular disease. The remedy was most useful in membranaceous croup, and in laryngysmus stridulus. He thanked Dr. Handfield Jones for his anatomical explanation.

LIVERPOOL MEDICAL SOCIETY.

SOME OBSERVATIONS ON SUBCUTANEOUS CYSTS, AND THE BEST MODE OF REMOVING THEM.

By JAMES HAKES, Esq.,
Formerly House-Surgeon at University College Hospital.

Mr. Hakes commenced with a description of the characters of the cysts to which he was about to refer, viz., simple unilocular cysts, whether diseased, pre-existing, or newly-developed structures, contained in the cellular membrane beneath the skin, or at some of the outlets of the body beneath the mucous membrane, and attached by loose filamentous tissue to the surrounding parts. The most common example was the wens of the scalp, but they were frequent on the face, neck, limbs, and almost every region of the body. The structure of the cyst-walls, and the nature of their contents, were then described from Mr. Hakes' observations, and Mr. Paget's Lectures, in the *Medical Gazette;* and this was followed by an account of the diseases he had known mistaken for cysts, viz., abscess, subcutaneous nævus, fatty tumour, and exostosis, with their differential diagnosis. In every case, where it was advisable to do anything, he thought the only treatment deserving consideration was, removal by the knife of the whole cyst, otherwise various unpleasant consequences might ensue. The removal by knife might be effected in two ways: one, by dividing the skin over the tumour, and then carefully dissecting out the cyst; the other, by transfixing the tumour from end to end, slitting through the part of the cyst and skin between the points of entrance and exit of the knife as it is withdrawn, and then lifting the cyst from its bed, by means of traction, with forceps. The first method is that usually followed, and frequently requires two or three minutes for its performance; the latter, though often recommended for the extirpation of wens from the scalp, had not, as far as he was aware, been commonly practised in other parts of the body, though it can generally be completed in almost as few seconds. The gain in time and facility of execution is not at the cost of any other advantage. The whole of the cyst generally separates easily, whether the walls be thick or thin; when in the latter condition, it requires care to avoid seizing with the cyst any of the filamentous tissue which connects it to its bed, as this would interfere with its removal. The wound generally heals by the first intention; and Mr. Hakes has never known the operation to be followed by erysipelas. To illustrate his remarks, the author read three cases, to show that there were scarcely any circumstances in which these cysts occur, where the latter mode of operating was not practicable and preferable to the other. The first case was that of a healthy woman, from whom, in 1849, he had removed a pendulous cystic tumour growing from the upper part of the vulva. On the 1st of February, 1851, she again presented herself. She was four months advanced in pregnancy, and had for some time noticed a swelling at the orifice of the vagina. On examination, there was found a cyst, about the size of an olive, beneath the mucous membrane of the left nympha, and, while the parts were in their natural situation, lying between it and the left labium externum. The cyst was loose and movable, and, by pulling the vulva outwards, could be made to project almost wholly into the entrance of the vagina. The cyst was therefore brought into this position, cut through, as has been described, and removed by forceps. All was easily accomplished: as the adhesions were very slight, no dressing of any kind was applied. The next example occurred also in a female, about 60 years old, and had been of sixteen years' standing. In the front of the lower end of the radius, there was a prominent oval swelling as large as an egg, its long diameter in the direction of the limb, the larger end reaching nearly to the wrist. It was clearly a cyst,—the skin moved freely over it, and it was moderately movable on the deeper parts. The same operation as in the last case was resorted to; all separated easily, except at the deeper parts over about half a square inch of the tumour; this was easily divided by a touch of the scalpel. In this case, union by the first intention was prevented by the effusion of blood into the cavity, but cicatrization was completed in twelve or fourteen days. The subject of the third case was a healthy labourer, at Ormskirk. He had noticed a swelling at the upper part of the neck near the larynx for six years, which had constantly increased. A short time before the author saw him it was punctured, (?) but only a little blood escaped. When Mr. Hakes saw him, (October 15th, 1851,) there was an oval swelling as large as a turkey's egg, occupying the anterior triangle of the neck, reaching from the left ear to the cricoid cartilage; in front, free; but behind somewhat overlapped by the sterno-mastoid. The swelling was elastic, and not very tense; no fluctuation could be perceived. Its removal was undertaken according to the mode recommended; but, in this instance, on account of the size of the tumour, the incision did not extend from end to end, but only for about an inch and a half or two inches along the middle of it. As soon as this was done, eight or nine ounces of thick stuff escaped; nearly all the cyst was then pulled out, by means of forceps, with the greatest ease; but one point close to the meatus of the ear did not separate without the exercise of considerable force. The wound and the greater part of the cavity healed by the first intention; but some inflammation took place around the upper part, which in a few days subsided, after the discharge of a little matter from the upper part of the incision. For the first week after the operation, he was unable to attend to his work. The author concluded by enumerating the places from which he had in this manner removed cysts of various sizes; they were, the scalp, face, ear, neck, chest, back, fore-arm, hand, thigh, perinæum, and from two outlets, viz., the lips and vulva.

MEDICAL NEWS.

Royal College of Surgeons.—The Annual Hunterian Oration was on Saturday delivered by Mr. James Luke. Having explained the objects of the founders of the oration, he alluded to the influence which a good example has upon the mind, as an incentive to emulative imitation, and regretted the very deficient education of Hunter; in eloquent terms urged the necessity for enforcing a good preliminary education as a means auxiliary to professional progress, and that more especially with regard to the Greek, Latin, and modern languages. Mr. Luke next commented upon the modern device of book-making, the chief object of which, he said, was to raise their authors from merited obscurity, and he forcibly contrasted these men with those more worthy of respect, who, trained under the influence of the Hunterian school, have sent forth productions deserving our highest commendation, bearing upon them deeply impressed internal evidence of great sagacity, industry, and extensive research, with other characteristics marking them as important steps in our onward healthful progress. These, while they eminently conduced to the benefit of the Profession, served as honourable memorials of the distinguished persons from whom they had emanated. Mr. Luke stated that the Council of the College had instituted examinations in classical literature, as a stimulus to its members, and with the hope that, upon the foundation thus laid, a useful superstructure might be raised, eventuating in those literary advantages which it had been the object of his immediate predecessors to point out. It was not intended, said the orator, that classical should usurp the place of professional knowledge, nor be encouraged beyond its proper and useful limits; for all reputation acquired at the expense of practical knowledge is meretricious. (Loud cheers.) After paying an eloquent tribute to the genius and untiring industry of John Hunter, the orator observed, that to obtain the most impressive notion of the pervading spirit which influenced all he did, we must place ourselves amid that vast collection of scientific facts of which it was the good fortune of the college to possess the charge. How much that charge is valued, may be inferred from the exertions used, and the expense incurred, for its preservation and increase, but

still more from the progress of professional knowledge, which the Hunterian Collection had greatly influenced. The learned orator then proceeded to comment upon the quackery which pervaded a small portion of the Profession, and into which they had lapsed from not having examined and carefully treasured all the facts coming before them. Had medical science (said Mr. Luke) been reared under this absolute dependence on facts, how different would have been its present condition; how little cause would there have been to give expression to any regret on account of the errors of some of its professors, or to lament that either folly or avarice had withdrawn many persons from its legitimate paths. The groundless assumptions which have been taken by the homœopaths, as a means of pandering to a popular sentiment, and impudently and falsely dignified by them with the proper attributes of science, serve to make manifest to what a depth of degradation the mind can and will descend when not upheld by the dictates of true science or moral rectitude. Godlike though our Profession be when properly used, how fallen from that high similitude when perverted to the ignoble purposes of absorbing avarice! No confidence should be placed in conclusions, beyond the limit of the data from which they are derived. It is thus that opinions have been promulgated, which would not have been justified by the premises. Such opinions, while they seemingly advance knowledge, serve, like *ignes fatui*, to lead from the true path, and entail a necessity upon others of a toilsome correction. The able orator concluded by a recommendation to his hearers to control their aspirations after knowledge by a wholesome reliance upon facts alone, and to eschew all dependence upon mere hypothesis and conjecture—the valuable and safe lesson taught by Hunter and his museum. (Loud and continued cheering.) In the evening the President, Mr. South, entertained, in the library of the College, a large and distinguished body of guests to dinner, not, we rejoice to say, from the College treasury, but from a fund left by Sir E. Home and Dr. Bailey, for the express purpose. The dinner was excellent, and well worthy the occasion, amply provided by Messrs. Watson Coggins and Banks, who have just succeeded to Freemasons' Tavern, and who appear fully competent to sustain its well-known reputation. Among the company present, were the Earl of Enniskillen, the Bishop of London, Sir James Graham, the Lord Chief Baron, Sir P. Egerton, Sir De Lacy Evans, Sir Howard Douglass, Captain Boldero, Sir William Burnett, Sir James Clark, Sir B. Brodie, Archdeacon Hale, the Provost of Oriel, Baron Dübin, Sir R. H. Inglis, Sir G. Staunton, Sir John Liddell, Professors Owen, Paget, and Stokes; Mr. Martineau, Mr. Quekett, Jacob Bell, Esq., M.P.; Drs. Wilson, Hawkins, Crawford, Pereira, Clark, Tyler Smith, and Bushnan; the President and Censors of the Royal College of Physicians; Messrs. Landseer and Hodgson, etc.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 12, 1852:—

Burman, William Maxwell, Wath-upon-Dearne.
Spender, John Kent. Bath.
Biggs, James Strange, Devizes, Wilts.

Military Appointments. — 69th Foot: Assistant-surgeon James M'Nab, M.D., from the 78th Foot, to be Assistant-surgeon vice Willocks, appointed to the 78th Foot. 73rd Foot: Assistant-surgeon Edward Booth, from the Staff, to be Surgeon, vice M'Donald, appointed to the Staff. 78th Foot: Assistant-surgeon Arthur Stewart Willocks, from the 69th Foot, to be Assistant-surgeon, vice M'Nab, appointed to the 69th Foot. Rifle Brigade: Staff-surgeon of the 2nd class Robert Bowen, to be Surgeon, vice Evans Garnon Lloyd, who retires upon half pay. Hospital Staff: Surgeon Duncan Donald M'Coy M'Donald, from the 73rd Foot, to be Staff-surgeon of the 2nd class, vice Bowen, appointed to the Rifle Brigade.

Naval Appointments.—Surgeons James A. Miller (1846) to the Simoom steam troop-ship, at Portsmouth; David Lyall, M.D. (1846), to the Assistance; W. T. Domville, M.D. (1852), promoted recently from being assistant-surgeon at Greenwich Hospital, to the Resolute; Fred. N. Rayner (1851) to the Herald. Assist.-Surgeons John Sole (1845) to the Tyne store-ship at Woolwich; A. M'Donald (1841) to the Torch. Acting-Assistant-Surgeon James Young, M.D., is confirmed to the Cumberland, 70, flag-ship on the North America and West India station.

Medical Appointments and Vacancies.—At the Lincoln County Hospital, the office of house-surgeon has become vacant, by the resignation of Mr. Thomas Sympson. Candidates' testimonials to be sent in before the 22nd of March; date of election, 1st of April. Candidates must possess the double qualification, and the gentleman who is elected will be required to hold the office for three years, at the least. A resident medical officer is also wanted at the Eastern Dispensary, Bath. The candidates must possess the double qualification. Salary, 80*l.* a year, with furnished apartments, and an allowance of 30*l.* for coals, candles, and servant. Testimonials to be sent in on or before February 27; date of election, the 18th March.

Appointment in India.—Dr. Shaw, of the Bombay Medical Service, has been appointed Deputy Assay-master at Madras.

Obituary.—In San Francisco, at 7 p.m., Dec. 13th, Richard R. Davis, M.D., recently from Syracuse, N.Y., U.S. At the Indian Valley House, near Auburn, on the 11th Dec., of bilious fever, W. T. Benedict, M.D., formerly of New York city, U.S. On the 11th inst., Charles Packer, Esq., surgeon, of Pitfield-street, Hoxton, aged 44. On the 16th inst., at 4, Broadway, Westminster, Charles B. Painter, Esq., surgeon.

Pathological Society of London.—Dr. Tyler Smith, Dr. Duff, and Dr. Drury, were, on Tuesday last, Feb. 17, elected members of the Pathological Society of London. Mr. Broadhurst and Dr. Devenish were proposed as candidates for membership at the same time.

The Royal Academy.—Mr. Partridge, Professor of Anatomy at King's College, and one of the surgeons to King's College Hospital, has been elected the Professor of Anatomy to the Royal Academy, in the room of Joseph Henry Green, Esq., resigned.

Mr. Brande.—This gentleman was nominated by the Court of Common Council to test the quality of the gas supplied to the City by the Central Gas-consumers' Company, but has declined the appointment, in consequence of his other avocations. The appointment is to be filled up at the next Court.

University of St. Andrews.—The Duke of Argyle has been elected the Chancellor of this University. He is also to be complimented with the freedom of the burgh.

The General Board of Health.—Lord Seymour has obtained leave of the House of Commons to bring in a Bill to confirm certain provisional orders of the Board of Health, relative to Brighton, Worthing, Worksop, Calne, Gainsborough, Rotherham and Kimberworth, Banbury, Burnham, and Welchpool.

The Arctic Expedition.—Surgeon Robert M'Cormick (1847) will proceed with this expedition, which is ordered to be made fully ready at Woolwich by the 15th of April next, but he has permission to act on his own judgment with a boat party on the arrival of the expedition at Wellington Channel.

Tests in the Scottish Universities.—The Lord Advocate has a notice upon the books of the House of Commons for a Committee of the whole House to consider the abolishing of tests in the Universities of Scotland. The proposition has been partly agreed to.

House of Lords.—The Earl of Shaftesbury has a notice on the books of the House of Lords, to bring before them the great cost and delay of commissions in lunacy, and of all subsequent proceedings with reference to the estates and incomes of persons found lunatic by inquisition, and also the difficulties and impediments in the way of the full operation of the remedial sections 94 and following sections of the Act of the 8th and 9th Vict. c. 100, as respects cases of small property and temporary lunacy. (Thursday, Feb. 26.) Further, the Earl of Shaftesbury has also a motion to bring under the notice of the House, the present care and custody of criminal lunatics. (Thursday, March 2)

A Deputation, consisting of Mr. South, President of the Royal College of Surgeons; Mr. Cæsar Hawkins, Vice-President; and Mr. Arnott, had an interview with Sir George Grey on Saturday, the 14th inst.

The Navy Preserved Meats.—The atrocities lately discovered with respect to the contract preserved meats for the Navy, were brought under the notice of the House of Commons on the 12th inst., by Sir W. Jolliffe, who, in a lengthened and elaborate speech, went into all the particulars connected therewith, drawing attention to the several contracts, and the mode in which they were carried out, their renewal with Goldner, even after the discovery of the interpolation of the foulest messes among the meats in the canisters, and the final inspection of the contents of the 6000 packages, with the ultimate cancelling of the contract, concluding with moving that "a Select Committee be appointed to inquire into the contracts, and the mode of making them, for the supply of meat provisions for the use of Her Majesty's Navy during the years 1847, 1848, 1849, 1850, and 1851, into the causes which have led to the receiving into the Government stores, and to the issuing for the use of Her Majesty's ships on foreign service, certain preserved meats, which have proved to be unfit for human food, and into the means by which an occurrence so prejudicial to the public service may most effectually be prevented." He should have added instructions to the Committee to ascertain who are the parties liable to make pecuniary compensation for the heavy loss

thus sustained, and how that compensation may be enforced, and, further, what punishment can be legally inflicted on the contractor for so shameful and so base an action. In his reply on behalf of the Admiralty, Sir F. Baring showed that matters in this respect had been a thousand degrees worse than had been suspected. He proposed that the labours of the Committee, to the appointment of which he offered no objection, should be directed to inquiries commencing in 1840, and not in 1847, so as to include salted as well as preserved meats, adding that, as to the latter, the inquiry was confined by some remarkable fatality to Goldner's meats. He (Sir F. Baring) "was sorry to say the evil was not confined alone to Goldner's meats, nor to foreign meats; he was sorry to say, what would be most unsatisfactory to the House, that there were others besides Goldner who had had contracts, and whose meats had been rejected." He asserted that the cases in which bad articles were used originally were very few indeed, and that in the majority of instances the meat, when preserved, was good, but became bad in the course of time, and that science had no means for really preserving meats as promised; for that the same result, the putrefying of the meat, had taken place in the canisters furnished by other and most respectable houses. (If this statement be true, what becomes of the reports, that in many instances, intestines filled with offal, lumps of tallow weighing one or two pounds each, masses of coagulated blood, ligaments, rotten and gangrenous—not putrid, but gangrenous—kidneys, shreds, etc., etc., were found constituting the major part of the canister contents. Either these reports are wrong, or the First Lord of the Admiralty has been deceived.) The statement that science was not far enough advanced to ensure the full preservation of meat, was subsequently shown, by Col. Chatterton, to be erroneous, for that the house of Gamble had supplied the Arctic expeditions with such canisters, and, among others, the Fury and Hecla. The Fury was wrecked in 1826, and her stores, including Gamble's meat, were years afterwards discovered, on Fury Beach, by Sir John Ross and crew, on their return from Victoria Harbour, where he abandoned the Victory, and used by them as food. Sir John Ross reported that this meat, although it had been so long exposed(a) to a climate where the thermometer ranged from 80° above zero, to 90° below, was excellent and nutritious. The house named Gamble and Co. had furnished altogether 24,314 cases, containing 108,393 lbs. of meat, and not one of them, on opening, was found to be the least defective. Another most important statement was made by Col. Chatterton, demanding the utmost attention from all parties. In July, 1849, a regiment destined for Hong-kong, was sent out in the Apollo troop-ship, on board which there were, including the crew, 789 persons, part of the officers and soldiers going out in another vessel, as the Apollo, fortunately for them, could not accommodate all. The Apollo took her preserved (Goldner's) meats from Portsmouth. On the voyage out, the cholera broke out, and raged fiercely among soldiers and crew. We have already given an excellent account of this epidemic, from the pen of Dr. Bryson, in the pages of this Journal; but it would appear that some other cause was at work, besides those assigned by our talented and scientific correspondent. "From the first, a most disagreeable smell and malaria were felt, which increased on the voyage; the cholera unfortunately broke out, and one officer, and twenty-five men were consigned to the deep: casualties caused by a crowded ship, bad air, and the almost insufferable heat of the between decks of the Apollo. The soldiers became weak and emaciated. Fresh provisions were ordered, and Goldner's cases were opened, but, as at Portsmouth, they presented such a mass of putridity and corruption, as to be totally unfit for food, and they were consequently thrown into the sea, while the preserved meats of the officers, which had been purchased at Cork, at Mr. Gamble's establishment, were in a delightful state of preservation. The (cause of) foul air and malaria were (was) thus soon discovered. The ship steered for Rio, and the troops, being disembarked, soon recovered a comparative degree of health, being under temporary huts, and amply supplied with fresh meat and vegetables. The Apollo, in the mean time, was thoroughly cleansed and fumigated, and, after a month's sojourn at Isle Grande, arrived in safety, after an eight months' voyage, at Hong-kong, the freight ship having arrived four months before. The malaria, however, was still on board, and its fatal effects were manifested, for 130 men died in about three months after the arrival of the regiment, and this mortality continued for a long time, doubtless caused by their perilous voyage, the crowded ship, the malaria, and bad provisions," and by the shameful and reckless arrangements in the barracks in Hong-kong, which Colonel Chatterton did not once allude to. Can any one doubt, after reading this, that the preserved meats, and the malaria they gave forth, had a great deal to do in originating the fatal pestilence by which a fine regiment was decimated? After some further remarks from Admiral Berkeley, Mr. Miles, Mr. Corry, Mr. M'Gregor, Capt. Seobell, and Col. Sibthorp, the Committee was agreed to, the inquiry to embrace a period from 1845 to 1851, both inclusive.

(a) The Colonel said twenty-five years, but that must be an error, if the Fury were wrecked in 1826, as Sir J. Ross returned to England in 1834.

Medicines for the Navy.—The scale of medicines which have been supplied to Her Majesty's ships and vessels of war, with but few alterations since 1782, has lately undergone a complete revision. A list of those to be issued in future has been sent to Haslar Hospital, and the several medical depôts, from the office of the Director-General of the medical department of the navy. We are glad to perceive that the new scale (which is to come into operation on the 1st of April next) contains many valuable medicinal agents which have been successfully adopted by surgeons in private practice on shore.

The London Fever Hospital.—The annual court of the Governors of this Hospital was held at the Freemasons' Tavern, on the 13th inst, the Earl of Devon presiding. From the Report it appeared, that 877 patients had been admitted into the hospital during 1851; 740 of whom were cured, 83 died, and 103 were still under treatment. The income during the year was 1609*l.*; the expenditure, 2269*l.*: leaving a balance of 660*l.*, which was partly met by some small legacies, amounting altogether to 509*l.* The question as to the appointment of a chaplain was referred to a Committee.

India.—The reports from India are tolerably satisfactory. From Upper Scinde they state, that the troops throughout the country are healthy; the weather was bitterly cold. Very little sickness prevailed at any of the stations in the Punjaub. The weather in Bombay is reported to be delightfully cool, and Europeans enjoy it much; but it is causing the death of numbers of the poorer class of natives, who are badly clothed and worse housed. Cholera is very prevalent, caused by bad food(a) and exposure to the cold.

Kent Ophthalmic Hospital.—An adjourned special meeting of the Board of Management was held on Saturday, the 7th inst., at the hospital, Maidstone, to receive tenders for the works contemplated in altering and extending the present buildings, the Earl of Romney in the chair. Mr. Whichcord, the architect, and Mr. Rugg, the house-surgeon, attended. The Honorary Secretary reported numerous contributions towards the "Building Fund," among which several second donations from original subscribers are recorded. Mr. Whichcord was directed to make the necessary arrangements for commencing the works forthwith. It was further agreed, that the hospital should be vacated on the 20th inst., and delivered into the hands of the contractor with a view to the works being pushed forward with every possible expedition. The building is to be completed in every respect on or before the 20th September. The out-patients' department will be continued as usual, and a limited number only of in-patients will be received. A. J. B. Hope, Esq., M.P., has presented a donation of 100*l.* to the "Building Fund" of the hospital.

Hospital for Incurables.—The plan of a hospital for incurable patients, proposed by Mr. Sampson, is already so far advanced and has been so warmly supported, that a very moderate addition to the fund collected, it is said, will be sufficient to justify the opening of such an institution. It is universally admitted—so says the advertisement—that the system of medical charity in this country must be incomplete without an establishment for the reception of persons afflicted with incurable diseases. If this be the case, as of course this new hospital is for the poorer classes, where are the union houses of the kingdom?

Extraordinary Crime.—The *New York Weekly Herald* says, a girl named Sarah Gerber has been convicted in Philadelphia of having caused the death of an infant, by compelling it to swallow pins and needles. The prisoner, who is only thirteen years of age, was found guilty of murder in the second degree, and will be sent to the penitentiary.

Poisoning by Godfrey's Cordial.—An inquest was lately held at the Stamford Union house, before Mr. Hopkinson, coroner for the liberty of Peterboro', on the body of Emma Thompson, aged six months. On the previous Friday, the child being cross, the mother gave it a quantity of Godfrey's cordial, from the effect of which it died the next day. Mr. Edwin Freeman, druggist, deposed, that he sold the mother of the child a pennyworth of Godfrey's cordial, which would contain about thirty drops of laudanum: he told her it was a bad thing to give to

(a) See the Report of Navy Preserved Meats: case of the Apollo.

children, but he did not offer any directions about the doses, as he supposed she understood the nature of the drug, it being commonly given to children—to such an extent, indeed, that he sold gallons of it: a teaspoonful and a half would contain seven and a half drops of laudanum. Mr. Charles Simpson, surgeon, said there was no doubt that death was caused by a very large dose of laudanum, administered in the shape of Godfrey's cordial; and the jury returned a verdict accordingly.

Mortality Notabilia.—The mortality of London, which rose to 1100 deaths in the first weeks of the year, has gradually declined, and in the week ending last Saturday the number was only 970. Taking the ten corresponding weeks of 1842—51, it appears that last week's amount was less than previous returns in six instances, and greater in four, and that the average of corresponding weeks was 1018. If this average be corrected for increase of population, it becomes 1153, compared with which the present return shows a decrease of 183. A spinster, aged 37 years, died on 5th February, in High-street, Homerton. The case, as described by her medical attendant, deserves attention:—"Chronic inflammation and thickening of ileum and cæcum, and appendix vermiformis, with ulceration of mucous membrane, produced by lodgment of gall-stones, which were worn flat by attrition. A large conglomeration of gall-stones was found above in the ileum, the ileum being thickened, ulcerated, and strictured below. Symptoms: chronic diarrhœa (2½ years) with latterly frequent vomiting." A woman was registered last week, whose death was the result of intemperance; and there are three cases of persons dying from privation, of which the following are the particulars:—On the 9th February, in St. Saviour's Workhouse, a widow, aged 79 years, died from "want of necessary food; bronchitis (one week)." In the North sub-district of Whitechapel, in Elizabeth-court, on 5th January, a labourer, aged 54 years, died "a natural death, accelerated by want of common necessaries" (Inquest); and in the Workhouse in the same sub district, on 31st January, a labourer, aged 47 years, died "a natural death; sudden from exhaustion and privations" (Inquest). The following case occurred at 49, Pear-tree-court, Clerkenwell: a boy, aged 15 years, died from "congenital malformation of the chest, malposition of the heart, valvular disease; ascites (3 months)." A lady, aged 65 years, died of "exhaustion from the removal of a mammary tumour (weight 16½ lbs.,) complicated by ventral hernia." The widow of a tailor, aged 79 years, died from "enormous bronchocele (many years), and from its pressure producing exhaustion and suffocation." A cab-driver from Nag's-head-yard, St. James, Westminster, died on 9th February, in Middlesex Hospital, at the age of 30 years, of "glanders." And again last week two deaths were registered as caused by carbuncle, namely, that of the widow of a mercantile clerk, aged 48 years, which occurred on 4th February, in Brunswick-street, Haggerstone, from "carbuncle (7 days), exhaustion;" and that of the wife of a painter, aged 63, which occurred on 8th February, in Bird-street, Lambeth, from "carbuncle (60 days), extensive slough of the skin (16 days)."

DEATHS *in the Metropolis for the week ending Saturday, February* 14, 1852.

Causes of Death.	Feb. 14.				Sum of Ten Weeks.
	0	15	60	All Ages.	
All Causes	441	332	197	970	10477
Specified Causes	438	332	197	967	10405
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	141	39	11	191	1983
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	3	23	10	36	509
3. Tubercular Diseases	69	106	5	180	1791
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	57	34	33	124	1212
5. Diseases of the Heart and Blood-vessels	4	28	12	44	395
6. Diseases of the Lungs and of the other Organs of Respiration ...	81	51	53	185	2132
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	17	19	15	51	591
8. Diseases of the Kidneys, &c. ...	...	4	4	8	96
9. Childbirth, Diseases of the Uterus ...	...	4	...	4	118
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	4	2	7	83
11. Diseases of the Skin, Cellular Tissue, &c.	...	1	1	2	10
12. Malformations	4	1	...	5	24
13. Premature Birth and Debility ...	31	1	...	32	232
14. Atrophy	17	1	1	19	172
15. Age	...	...	43	43	650
16. Sudden	2	3	2	7	133
17. Violence, Privation, Cold, and Intemperance	11	13	5	29	268
Causes not Specified	3	...	...	3	72

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your Correspondent "Justitia," asks a very proper question, but does not, in my opinion, quite state enough.

Is a legally-qualified practitioner justified in meeting a gentleman who only holds the diploma of the College, but who is in practice as a general practitioner, sending out medicines, &c. &c.,—in fact an apothecary without licence?

As I cannot understand that there is any difference in the case of a gentleman practising without any diploma, and one practising as an apothecary, not having the licence to do so, some medico-ethical association may perhaps enlighten me.

I should much rejoice to find the statement contradicted, that a respectable union surgeon employs (!!!) a druggist to vaccinate for him. It is, in my opinion, sanctioning him.—I am, &c., A Subscriber.

Mr. Thompson, of Tenbury, and *Mr. Simpkins, of Bewdley*, are right. We reply as to Dr. Ely, of Rochester, on the same subject (p. 78), "*Nemo mortalium omnibus horis sapit.*"

Mr. Toynbee's papers will be continued next week.

Mr. Davenport, of Hull, is thanked for the offer; but we have not space in our columns for a second edition of his "Mirror of Dentistry."

Students.—A note addressed to Professor Hoffman will elicit all particular concerning the College of Chemistry in Oxford-street.

Three communications upon Scalp Wounds, and as many on the Final Cause of Menstruation, must stand over till next week.

Alpha will receive the information he requires by addressing a note to the Secretary of the Apothecaries' Company.

Dr. C. Searle is thanked; but the length of the paper on the Nutrition of Animals precludes its insertion in our Journal.

R. D. S. writes:—"After all the twaddle uselessly spoken and written, where is the medical practitioners' *Alma Mater? Non est!* Why so much to establish another rhubarb hall? Shakspeare, I think, has said enough to satisfy all. Where the honour in re-establishing it under a new name? What's in a name? A good deal in public opinion! Then let it be abolished; and, as at present, a College of Physicians for physicians, and a College of Surgeons for surgeons, the highest ordeal for each respectively. Let there be established from each a joint board, for the examination of all candidates that may enter the Profession compulsorily to undergo before proceeding higher. This to be a legal standard whereon they may rest their claims, if they ascend higher; the status to be honorary, either as physician or surgeon."

C. L.—We can say nothing of the party mentioned in "C. L.'s" letter, as he is utterly unknown to us. Any surgeon of eminence would fully understand and efficiently treat the disease named.

Civis is thanked for his communication.

A Subscriber of Ten Years shall be answered next week.

A Subscriber shall receive an answer in our next Number.

A Practitioner.—We assure you, you have quite mistaken the character of that gentleman. If you wish to know more, read the history of the Archbishop of Toledo, in "Gil Blas."

Tyro.—Macquer, "a layman," as the homœopaths would say, bestows this faint praise on Hippocrates:—"He has always held the same rank among physicians as Homer among poets, Demosthenes among orators, and Herodotus among historians."—*Dr. Nugent's Translation.*

COMMUNICATIONS have been received from—

Dr. Daubeny, of Oxford—On Liebig's Method for Determining the Amount of Urea in Urine; Mr. Houghton, of the Dudley Dispensary—Remarks on Mr. Warwick's Case of Injury to the Head; A Reader, Portsmouth—Queries on Inoculation; Dr. Searle, late of the Honourable East India Company's Service—On the Nutrition of Animals; Dr. Barclay, of St. George's Hospital, and Curzon-street—Hospital Report—Jaundice from Suppression of Secretion; Mr. Henry Thompson, of Wimpole-street—On the Means of Applying Nitrate of Silver to the Urethra; Dr. Hunt, of Brook-street—On the Severer Forms of Heartburn and Indigestion; Dr. Foley, of Kilrush—On Prolonged Gestation; Dr. Webster, of Cambridge—On the Occurrence of Uterine Ulceration; Dr. Neale, of Fazeley—Case of Uterine Irritation; Mr. Milton, of Jewin-street—Hospital Reports; Dr. F. Bird, of Brook-street—On Ovarian Tumours; Dr. Handfield Jones, of St. Mary's Hospital—Examinations of the Effects Produced by Certain Medicines; A Subscriber; Mr. Simpkins, of Bewdley; Mr. W. E. Thompson, of Tenbury, Worcestershire; R. D. S.; A Subscriber for Ten Years; Alpha; Students; The Hon. Secretary of the Kent Ophthalmic Hospital; C. L.; A Subscriber, Hull; Mr. T. Dickson, Resident Medical Superintendent of the Manchester Royal Lunatic Hospital; Civis; The Secretaries of the Geological Society and Medical Society of London; and Dr. R. S. Mair, of Paisley.

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ON SOME FORMS OF CACHECTICAL GANGRENE OCCURRING IN VENEREAL PATIENTS.

Gentlemen,—There is now lying up stairs in Abraham's Ward a patient, at length fortunately convalescent, who has undergone as extreme a process of sloughing in the groin as I ever knew terminate in recovery. I purpose talking to you to-day about this case particularly, for it has been very interesting and instructive; and in the course of my lecture I shall allude to one or two other cases that have been under your notice. I begin by giving you an abstract of the case to which I first referred.

The patient, John Molloy, aged 23, was admitted into Lazarus Ward Sept. 30th, having syphilitic blotches of the skin, a recently opened bubo in the left groin, some erythema in the throat, and the remains on his penis of a chancre contracted in June. He had no appearance of general ill health, but had been accustomed to drink spirits too freely. It was determined to treat him with mercury, and accordingly five grains of blue pill, with a quarter of a grain of opium, were given him, at first three times a day, subsequently (as his mouth became affected) only at night. As I placed no great reliance on his strength, he was allowed a pint of porter, in addition to the full diet of the hospital, and, after a while, was ordered two grains of quinine twice a day, as a further precaution against the mercury proving hurtful to him. Under this course of medicine, the signs of constitutional syphilis had diminished, when, at the beginning of November, it was thought desirable to lay open a sinus which remained from his bubo in the groin.

After a week or ten days (Nov. 13) this wound appeared unhealthy. Its vicinity had swollen and reddened; pain was complained of, and ulceration had begun in the line of incision; the pulse was quick and irritable, and there was some anxiety of manner; the gums were but very slightly tender, the tongue was clean, bowels natural, appetite middling, sleep interrupted by pain.

The mercury was immediately discontinued, a night dose of morphia given, and six ounces of wine per diem allowed.

On the 17th, the condition of the wound was worse, the surface had begun to break down into a slough; the surrounding tumefaction was considerable, and his general condition seemed more expressive of weakness and irritability. I now thought it indispensable to remove him from the atmosphere of the venereal patients (many of whom were salivated at this time), and he was accordingly transferred to my clean ward—Abraham's—where he still remains.

Matters still went on badly; and for seventeen days (though not uniformly) the mischief continued to advance.

First, the wound deepened itself rapidly to a level that threatened the large vessels of the thigh, and then widened itself, till it reached an area of forty or fifty square inches. The sartorius, the tensor vaginæ femoris, the pectineus, the tendon of the external oblique, and the whole length of Poupart's ligament, were, to this large extent, stripped of their coverings; and, when the foul discharge was removed from the wound, the femoral vessels appeared lying in the slough at the bottom. Partial efforts at reparation were not wanting; but, as one spot improved, another grew worse, and as the latter amended itself, the first began again to slough. The discharge was copious and fetid. The pulse for many days was from 120 to 130. He began to cough too, with bloody purulent expectoration, and his appetite for solid food began to flag a little.

On the 29th he lost an ounce of venous blood, apparently from the internal saphenous vein; and, partly from this loss, partly from the alarm it occasioned, he became much depressed, and the destructive process seemed to take a fresh start.

During the last few days he had lost flesh very noticeably; his face was now pale, except a patch of red on each cheek; his tongue was tending to get dry and cracked; his belly became a little tympanitic and tender; his pulse was utterly feeble, mounting at last to 140 in frequency; pressure in the wound was several times called for to check arterial hæmorrhage; grievous pain was complained of down the entire length of the limb, and was increased by every dressing of the wound; while the extremity itself was paler than the other, and sensibly of a lower temperature.

These alarming symptoms were at their worst, and the wound was at its largest, on the 2nd and 3rd of December; on the 4th he began to mend. The tongue was moister; he was less averse to food; there seemed a little more life in his manner; the limb had recovered its colour and temperature. On Dec. 5th, all sloughing had decidedly ceased; his pulse was down to 110; tongue natural; appetite sufficient. On Dec. 7th, the wound was a uniform granulating surface; from which time to the present his history is one of uninterrupted local repair, accompanied by daily improvement of general health, and sustained by as much food as his voracious appetite can compass.

Now (Jan. 17) all that remains of the immense gap which I described to you, is a superficial sore, the skinning of which is every day getting nearer its completion.

Most of you, having watched this case during its progress, can remember how extremely near to death the patient was brought at the time when his case was at its worst. His position seemed nearly hopeless. Not only during the first three days of December did he seem dying—as he well might, from the exhaustion and irritation of so immense a destructive process—but, moment by moment, one expected his femoral vessels to give way, and his life immediately to terminate by syncope. For a fortnight uninterrupted watch was kept at his side, the bed-clothes so arranged as to leave his groin exposed; and during the greater portion of this time, when the chance of hæmorrhage was most imminent, the dressers alternately undertook this tedious duty; so that some one of them remained beside him day and night. I take this opportunity of thanking them, and the house-surgeon (Mr. Carpenter) for their attention to the case. By their care, the frequent jets of arterial hæmorrhage which took place at his worst period, were promptly controlled by pressure; and the strength thus economised to him made the difference between life and death. This hæmorrhage was no doubt from secondary arterial branches, not from the femoral trunk. But there were very ominous signs of the peril to which this trunk was exposed; not only in the fact that one saw it beating at the bottom of the chasm; not only in the fact that its branches were being cut across in the process of destruction; but still more in another fact, which I have mentioned to you. When the temperature of the limb fell, when it became pale and cold, for want of circulation, what was the meaning of that symptom? Probably this, that the morbid process had actually invaded the very substance of the vessel, at least in a portion of its thickness; that under this attack, as under a direct mechanical or galvanic irritation, the muscular coat contracted, so as to obliterate the channel; that the cold and anemiated limb bore witness to that constriction in its pipe of supply. If this interpretation be right, then, at the moment when the disease arrested itself, the artery had actually begun to participate in the morbid process, and must have been on the very verge of destruction.

Now, with respect to the treatment of this case, let me tell you first on what view of its nature I proceeded. I did not consider the morbid process set up in the groin to be a result of the original infected disease; I did not consider it to be a syphilitic process.(a) Although to all appearance the action of mercury on his system had not hitherto been violent, although his gums had not been much affected by the medicine, nor his bowels irritated, yet, considering all the circumstances of his case, I could not doubt that he was suffering from its operation. It is, indeed, notorious, that the ordinary conditions of debility will determine the sloughing of inflamed and infiltrated tissues; but to the causes of

(a) It may be worth notice, in connexion with this and the following case, that during the time when they were under treatment, there were observed in London generally (as though from atmospheric conditions) some peculiarities in many persons submitted to the action of mercury.

such debility the man had not been exposed. He had been for six weeks under observation in the hospital, not only exempt from privation, but having probably far more comfort, and far better diet, than he was used to. The only unnatural influence to which he had been exposed, was the action of mercury, and this in my opinion was sufficient to explain the disease which had arisen. It may almost certainly be alleged, that the manner in which this medicine acts curatively in syphilis, and in many other diseases, is by producing in certain elements of the blood a series of destructive changes. In those elements it apparently establishes a peculiar disorganising process (the chemical results of which are evolved in various fetid products during its operation) and this process readily extends itself to the kindred elements of any inflammatory effusion existing in the person whose blood is thus affected. In this way it is that mercury acts antiphlogistically; not as moderating the hyperhæmial process, but as determining the necrosis and dissolution of the inflammatory products. When in a case of iritis under the influence of mercury, you see masses of adhesive material vanish from the anterior chamber, and the humours recover their transparency, you may feel assured that the changes thus represented in a small portion of the body are not so partial as they seem, but that the dissolution of the coagulated lymph in the eye has been preceded and is accompanied by similar changes affecting the kindred materials of the whole volume of circulating blood.

The condition of mercurialism, then, is a variety of blood-disease, which we are in the habit of inducing artificially, for specific curative purposes, and which, happily, we are able for the most part to regulate within limits strictly consistent with the safety of the patient.

Knowing Molloy's history for the previous six weeks, when I saw that sloughing had begun in his groin, I could have no hesitation in attributing it to the action of mercury. Although the medicine had been given with due care; although precautions had been taken against its acting on him in any excessive manner; yet, obviously, from some peculiarity in his constitution, the degree of mercurialism produced was suddenly becoming detrimental to his powers of reparation; the medicine had become a poison to him.

With this view of the case, I could not doubt that the sloughing would go on to a very considerable extent. In instances where gangrene arises in mere debility, the process may for the most part be quickly arrested by the appropriate exhibition of stimuli. In instances where it arises in the vehemence of some inflammatory process, it may likewise often be stopped short. But in cachectical gangrene—in gangrene dependent on contaminations of the blood, the case is less easy; for, unless a specific antidote to the cachexia lies within our control (of which I will presently give you an instance) time becomes an important element in the cure. In such cases the blow has been struck; and, as its result, a *series of changes* has to be accomplished, which medicine has no direct power to arrest, and which inevitably involves a certain amount of local destruction. There are many cases of this kind to which I may refer you for analogy, where the object of treatment (since it cannot stop the action which is set up) is an indirect one in relation to the disease, and consists mainly in supporting the patient through a painful and exhausting process which nature has begun.

With fever, with erysipelas,—which you cannot abruptly stop,—you know that the tendency of the disease is to terminate itself; you know that your small-pox patient will presently give up pustulating (just as your glass of soda water will give up bubbling) if by appropriate measures of support, and by judicious alleviation of particular symptoms, you succeed in sustaining the powers of life through that critical but temporary process.

So, looking at Molloy, I considered his position analogous to that of a person stricken with some morbid poison which produces gangrene (with scarlatina for instance, and sloughing tonsils) and as I saw that the impression was made on a great extent of tissue, I was prepared for a very large destructive process, which I knew myself unable directly to arrest, and through which, therefore, I must endeavour to sustain him.

1. My first care, of course, was to suspend the operation of the injurious cause. He had been taking five grains of blue pill every night: that was immediately discontinued. He had been lying in a venereal ward, where the atmosphere contains enough mercury to affect sensitive persons. He was immediately removed to another ward, where he had the advantages of a purer atmosphere, and of better ventilation.

2. I added at once some ounces of wine to his diet, and this quantity I gradually increased in proportion to the severity of his disease, till he was taking a pint of wine, half a pint of brandy and porter per diem, with as much solid food (including meat and eggs) as he could be induced to take. Fortunately, during nearly all the progress of the case, his appetite was sufficiently good for him to eat meat daily.

3. I had to obviate a danger arising in the foul condition of the wound—the danger of the system being injuriously affected by the absorption of putrefactive material. This is no inconsiderable risk, where a large sloughy surface, flooded with stinking discharge, is contiguous to blood-vessels; it has, probably, a great share in producing the pneumonia, or the purging and vomiting which often arise under such circumstances; and it has always appeared to me an important part of the treatment in these cases to provide against the retention of fetid matters in the wound. Accordingly, so long as the sloughing process continued, the deep cavity in the groin was emptied of its decomposing discharge three times a-day, and was thoroughly washed with a solution of chloride of soda. It was with great apprehension that, at one period of the case, I found the patient coughing up bloody sputa. I dare say that this may have indicated some partial affection of the lung by the cause alluded to, and that, except for the care taken in this respect, some graver mischief would have arisen.

And this was the gist of my treatment. Some quantity of morphia was occasionally used; but the pain of the sore, after the first access of the disease, was not so severe as to render any large employment of narcotics requisite.

In reading of cases of sloughing sore, you will often have seen mention of strong nitric acid as an important—indeed a sovereign, remedy for local application; and it may occur to you to ask, why I did not employ it in this case. Leaving other arguments for the moment, I may give you, as a sufficient reason for its non-employment, that the base of the wound, containing (even from a very early period of its course) the exposed femoral vessels, would not be quite an eligible spot for the application of an escharotic remedy, which might have produced the very mischief I was most anxious to avoid.

Nor indeed, putting this reason aside, should I have felt quite confident of deriving advantage from an escharotic application of the nitric acid. This remedy was first introduced to the Profession twenty three years ago, by Mr. Welbank; and you cannot read his paper in the eleventh volume of the "Medico-Chirurgical Transactions" without feeling that he made a valuable addition to the medical resources of the time. But I suspect that other improvements which have taken place since the date of Mr. Welbank's paper have superseded the necessity for his remedy. The pathology of sores becoming gangrenous in depressed states of the system is now better understood than formerly; and the constitutional treatment of such cases is recognised to ensure the complete control of their progress.

The "sloughing phagedæna" of Mr. Welbank's paper was known in the Borough hospitals (thirty years ago better than now) as the "Swan-alley sore." It was essentially a disease of debility. The subjects of it were commonly delicate and scrofulous girls (sometimes of tender age) who had passed but few months in prostitution, plying their unhappy trade in brothels about the docks, undergoing the unlimited lust of the lowest population (chiefly foreign sailors) receiving the visits of as many men as there are hours in the day, getting little rest or food, and subsisting chiefly on gin. After a certain period of this jading existence, the girl would contract some local disease—would be forced to continue her career in spite of increasing pain—would eat and sleep still less, and drink still more, than previously—would become constitutionally ill, so ill as to break down; and then the keeper of the brothel would send her to the hospital. She would be admitted into the venereal ward with some small foul ulcer, having thick abrupt edges, and a halo of dusky redness around: soon after admission, an acute sloughing process would be set up in this sore, and, unless arrested by treatment, would spread till the patient sank under its influence.

Now, at the date to which I refer, such a patient, admitted into the hospital, was at once introduced to the venereal ward, where the custom of profuse salivation had

hardly ceased, and where the air was unwholesome with mercurial fetor; she was herself not unlikely to be exposed to mercurial treatment, and, worst of all, was not exempt from the chance of being bled by leeches or the lancet. I can easily conceive that, under these circumstances, the nitric acid may have been an invaluable remedy. Nothing could more powerfully tend, according to Hunter's phrase, to "alter the action of the part;" in other words, nothing would more promptly rally to the rescue of the part whatever remaining powers of reparation might lie at the command of the system.

And this (let me observe in passing) is the general *rationale* of stimulant applications to such local diseases as require simple acts of repair. Nature tends to distribute equally, among all the parts of an organism, those energies and materials which are requisite for their conservation and repair. If after some local lesion, or in the progress of some local disease, we find that the natural proportion of nourishment is insufficient for repairing the affected part, then, by stimulant applications, we attract a disproportionate vigour of re-action and vitality to the spot which seems to require it. But, generally speaking—as the body, if adequately nourished, is fully competent to the exigencies of all its parts, and as the nourishment of a part (injured or uninjured) only languishes, where the total system is feeble and ill-nourished; so we find, that our better and safer method of promoting local acts of repair is rather by increasing the general resources of the system, than by exciting a disproportion of local activity. We should deprive ourselves of valuable auxiliary forces in the treatment of local disease if we were to exclude topical stimulants from our Pharmacopœia. I would only press on you that (in respect of promoting repair) their importance should be considered secondary to that of giving general support, and that where any local labour has to be accomplished by the system, if we take care of the whole, Nature will provide for the part.

I think, then, that thirty years ago, the sloughing phagedæna had not the same advantages of constitutional treatment as it would now possess; that, in the absence of those advantages, the topical use of nitric acid was a valuable invention; but that the necessity for its use has now undergone much diminution. The transference of such cases to clean and airy wards, not infected by mercurial fetor, the gentlest regulation of their bowels, the washing of their wounds with chlorinous preparations, and the giving of appropriate support to the fullest extent which can be borne, are measures which have seemed to me sufficiently effectual, in cases where I have witnessed their operation, for checking that sloughing phagedæna which, as a disease of debility, arises in the foul wards of an hospital.

And still more should I be disposed to give preference to these means in a case like Molloy's, where I could not consider the diseased process to be one of mere debility; where I could not but recognize in the symptoms the deleterious operation of mercury; where I found in the case an exact counterpart to the action of some morbid poison, which evinces, in acts of local disorganization, an affected condition of the blood; where I knew, that, according to all analogy, the local process would advance till the general disease was amended, and that meanwhile any application of escharotics must be useless or hurtful.

My view of his case led me to regard it as an instance of excessive mercurial action, having the gangrenous process for its local result; and on this view my treatment was founded.

As regards the case in its original form, and my employment of mercury at that time, it would detain you too long if I were now to explain to you the principles which determine my use of mercury in syphilis. I will merely observe, that this case was one of a class in which I habitually employ it with advantage; that the medicine was very carefully given; and that if I could start afresh with the patient, I do not know that I could justify any difference in this respect. Those peculiarities of constitution which determine for certain persons an exceptional violence in the operation of medicines, are not evident beforehand; and often it is only when too late for, prevention, that we learn our patients' idiosyncrasies towards mercury, iodine, and the like.

The inviting cause of the attack was the laying open of a long sinus in the groin; but although one can have no doubt of this having proved the immediate occasion of the gangrenous process, there was no reason beforehand to anticipate that it would do so.

At the access of the phagedæna, my only hesitation was as to the propriety of giving for a day or two rather active aperients, with a view to determine towards the intestinal canal whatever mercury might be remaining in the system. I was deterred by my fear of reducing his strength; but now, having a retrospect of the entire case, I am disposed to believe, that if I had adopted this course (though it would have necessitated at the time a larger allowance of stimuli) it might have diverted from his groin some share of the morbid action, and might perhaps, in the long run, have tended to economise his powers.

I have repeatedly adverted to the similarity borne by this case to those in which the operation of some morbid poison has been exerted on the blood. The same affinity was shown still more strongly in a case of true mercurial erethism lately under my care, and I therefore give you an abstract of it:—

Nov. 18, Harriet Frewer, a servant girl of healthy and somewhat florid appearance, free from any other ailment than secondary syphilis of recent origin, was admitted on account of this disease into Magdalen's Ward. On the 20th there was prescribed for her pil. hydrarg. gr. v.; opii gr. ½ bis die. On the 27th, no visible effect having arisen, this pill was ordered to be taken three times a day instead of twice. On the 2nd December, symptoms arose which suggested the expediency of discontinuing this treatment. On the 5th, those symptoms were at their height; thence onwards they gradually declined, so that, in a few days, she had regained her former condition. Pallor, dejection, and debility were the first changes in her which attracted attention (Dec. 2,) and, as this state advanced, her depression of muscular strength became extreme; she was quite unable to stand; the heart's action became irregular and intermittent—at first only on her attempting to move, but presently even when she was at rest, so as to give her the utmost sense of anxiety and uneasiness of the præcordia. The extremities were cold; the face and scalp became puffy and tender; the eyelids were so œdematous as to be kept closed; and a slight erythema spread over every part of the face and neck. Meanwhile the tongue was moist and quite clean; there was no fetor of breath; the gums were in their healthy condition; there was no albumen in the urine.

On the 5th, when the symptoms were at their height, and when her depression was being counteracted with wine and ammonia, the bowels began to act loosely, and several fluid motions occurred during this and the following day. With the increase of this evacuation the other symptoms declined; the heart's action became regular; the swelling of the face began to subside; and on the 8th she was so far convalescent from her poisoning, that we were able to diminish the allowance of wine, which her previous debility had called for.

How exactly this corresponds to the general formula I have given you for the symptomatology of a blood-disease! "When you find—whether you are dealing with some drug of the Pharmacopœia, or with a disease like gout or rheumatism—when you find a first stage of general discomfort, with vascular excitement or depression, followed and relieved by a second stage, in which particular excretions are increased, or in which some new product is cast off (with or without local inconvenience,) there is room to suppose that, during the first of these successive processes, something has been accumulating in the blood; which something, during the second stage, succeeds in finding an outlet from the system, and so works a cure for the previous inconvenience."(a) And in the two cases, as we compare them together, we see illustrations of the twofold manner in which blood-diseases may terminate; how, namely, the effort of elimination may confine itself to the increase or modification of some particular legitimate secretion; or how, on the other hand, it may seize on some particular tissue, and may set up a cachectic gangrenous inflammation there.(b)

In Frewer's case, I would beg you to observe especially that, at the period when her general distress was greatest, there was no trace whatever of mercurial action on the mouth; that the drug had established none of those local

(a) "Lectures on General Pathology," p. 228.

(b) It is to be regretted, that circumstances prevented a chemical examination of the sloughy discharge from Molloy's groin, in which mercury might probably have been discovered.

determinations which arise from its catalytic action on the blood. This tallies with our general knowledge of poisons, and it accords with an observation made by Mr. Pearson, (in that admirable volume where he first described and named the state of "mercurial erethismus,") that, when mercury acts thus injuriously, its depressing power is not accompanied by a proportionate inflammation of the gums.

In the course of this lecture I have had occasion to refer to the fact, that the atmosphere of our venereal wards often operates injuriously on certain patients. Two conditions have to be taken into account for the explanation of this fact: first, that the air probably contains a good deal of mercurial vapour; secondly, that it is highly charged with those fetid exhalations which our salivated patients evolve, and which testify to the specific chemical changes excited in them by the drug. I am not prepared to say, that the first of these influences is the most important; it is quite according to the analogy of similar processes, to believe that an atmosphere charged, like this, with the products of a specific though artificial blood-disease, may tend to operate infectively on healthy persons within its range, and may excite in their fluids the same sort of alteration as the mercury itself would directly have produced. But, avoiding speculation on this point, I can assure you of the fact, which, indeed, you have yourselves seen illustrated, that every now and then we get clear evidence of our patients becoming cachectical under the operation of this atmosphere. I remember, when I first took part in the surgical practice of this hospital, having a striking case to that effect. A girl having an open gonorrhœal bubo, which ran very deeply into her groin, was admitted into Magdalen's Ward in an extremely debilitated condition; the bubo was either sloughing or threatening to slough; under appropriate treatment by tonics and stimulants she improved day by day till the groin seemed no longer a cause for alarm. I now found that it became stationary; it next got foul and began to deepen,—unfortunately, with so small an exterior opening that its real depth was hardly recognised; signs of hectic fever arose, but these (as she was supposed to have tubercles in her lungs) were not taken at their true meaning; daily she became worse, and it was evident she was rapidly sinking. It was not till this moment that the conviction flashed upon me that she was poisoned by the unwholesome atmosphere of the venereal ward. I immediately ordered her to be removed to my clean ward, but it was too late. Next day urine began to well up from the hole in her groin; the destructive process had mined beneath Poupart's ligament into her pelvis, and perforated the bladder. In a day or two more she was dead. Observe, that in this case, there was no syphilis; that no mercury was given; that rapid improvement followed her admission to the hospital,—testifying, I think, to the success of the general treatment; that then, with no ostensible cause, the morbid process gradually rose again and killed her.

Among the old cases of sloughing phagedæna, I suspect there may have been many not dissimilar from this in respect of their pathology; and, if you refer to Mr. Welbank's Essay, you will find, I think, that his second case is its exact parallel.

During the last few years, I have, on several occasions, seen the same order of events. A patient has been admitted into the venereal ward, with some local sore, not arising in syphilis, and not requiring or receiving any mercurial treatment,—say, a gonorrhœal bubo. For a while everything has gone on well; then ill health has seemed capriciously to arise; the sore has become foul with incipient gangrene —and here, I am happy to say, the similarity has ended; for, since the case to which I first referred, I have had no unsuccessful result; the facts of that case were very instructive to me; and ever afterwards, as I saw similar signs arising, I took one simple measure, which has uniformly been successful.

What was this measure? Some of you may remember a very good illustration of it which occurred eighteen months ago, and which I quote with more satisfaction than the last case. L. S. was admitted into a venereal ward (Lazarus) with a large gonorrhœal bubo in the right groin, Aug. 27, 1850. After a while the abscess was opened by a free incision. At the time of his admission he was in good general health; and the bubo, after being incised, went on satisfactorily for some little time, and then became indolent. General tonic treatment was liberally employed;—porter, quinine, iron, additional meat, wine, local stimulants, were one by one brought to bear on him with little, or but temporary effect. The hole in his groin was clean, but it discharged very profusely, and made no progress towards repair. He had meanwhile become weak, and got a quick pulse, with a disposition to night-sweats. On the 21st of October I observed a good deal of infiltration about the groin,—that its surface had become foul with commencing gangrene, and that his constitutional disturbance was more marked. He was in a condition very like that of Molloy, at the time the latter's groin began to slough. *Immediately, I ordered his removal to a clean ward.* No other change was made in his treatment. The effect seemed instantaneous. The wound at once became clean, began to granulate, and, without any interruption whatever, rapidly advanced to complete cicatrization.

You will have observed, gentlemen, that, in commenting on Molloy's case, and in adverting more briefly to others, I have not entertained the notion of syphilis having had any direct and specific influence in producing the gangrenous process. Though all the cases were venereal, yet in many of them there had been no syphilis,—nothing beyond gonorrhœa; and, in respect of all of them equally, my experience justifies me in assuring you, that the syphilitic poison was not an immediate cause of the mischief. We have seen the sloughing process established under the influence of debility, aided probably by the unwholesome atmosphere of salivated patients; and we have seen it in a more intractable form, arising under the conditions of mercurial cachexia. But is there no syphilitic sloughing? Yes; the acuter syphilitic processes, both primary and secondary, will sometimes, though rarely, by their mere intensity (like any common inflammatory act), occasion a termination in gangrene: thus occasionally we see a penis or tonsil fall into the state of slough. Of these cases (where the gangrenous termination can only be considered accidental) I have not time now to speak; but there is one form—not a very frequent one, under which syphilis does, I think, directly tend to establish the process of sloughing,—that is, where it invades the subcutaneous areolar tissue; and I gladly say a few words to you about this form of cachectical gangrene, partly because it is not much noticed among writers on syphilis, and partly because I can tell you with more than usual certainty how you may cure it. My experience of this form of disease has been to the following effect:—A patient, usually a woman, apparently debilitated and unhealthy, but with no obvious syphilitic symptoms, applies with, it may be, a sore leg. It is examined, and there is found a circular, foul ulcer, large and deep, with slough adhering at its circumference, perhaps also at its base, and with no great amount of vascularity around it; it is described to be the seat of severe pain. The patient's appearance, and her pulse and tongue, probably suggest tonic treatment, and opium is used locally or internally, or both. To your surprise this does no good. As you visit your patient's bedside every two or three days, you find the pain unrelieved; and the slow gangrenous process goes on, certainly at its circumference so as to increase its area, and probably also at its base so as to deepen it. By degrees it gets alarmingly large, and the pain increases in proportion. The removal of skin occurs by ulceration, the gradual and circular extension by slough being confined to the subjacent areolar tissue.

As you look at such an ulcer, you might be disposed to ask, with respect to its method of production, whether it had affinity with rupia, whether it depended on the extension of a rupial sore to the deeper textures, and on their subsequent gangrene. I am not prepared to say, that this process might not produce similar results; but my observation of the cases I am describing to you leads me to believe, that they habitually begin as an affection of the areolar tissue, and not of the skin,—that a very definite indurating deposit takes place in some round patch of the areolar tissue, making a circumscribed painful tumour there,—that the skin at first is little affected, but presently inflames and ulcerates; that then a slough, like wet wash-leather is seen where the induration existed; and that from this time the sloughing process indolently goes on in a widening circle of areolar tissue, with corresponding removal of the skin. Under some circumstances, one may see only a foul circumference to the sore; under others, there may be more or less considerable shreds of slough. Taking the broad

features of the disease, and comparing it with a more familiar disorder, you would be disposed to speak of it as a chronic creeping carbuncle.

In most instances which I have seen, the subject has been a female, the site an extremity—usually the lower; and the morbid process confined to a single spot. Commonly, too, during the prevalence of this particular symptom, obvious manifestations of syphilis have been temporarily absent, and the evidence of a constitutional taint has only been discovered on close inquiry. It has appeared to me to occur as a late manifestation of secondary syphilis in persons of depressed general powers; and, though chronic, it has seemed a process of sufficient intensity to set in abeyance the other signs of the syphilitic cachexia. As to its eventual result, I presume that, like all humoral diseases, it tends to ultimate cure, and would, therefore, not advance indefinitely; but it certainly will continue increasing for many months, causing extreme pain and illness throughout, and obstinately resisting all non-specific measures of treatment.

The one specific measure for the cure of this morbid process, is the internal use of iodide of potassium. It operates as quickly, as magically, in arresting this disease as in relieving syphilitic periostitis. Its action seems immediate;—the pain ceases, the patient sleeps well, the sore cleans itself, and the chasm of many months' making begins to fill itself up. Tonic treatment, which is quite powerless to change the morbid action, becomes a valuable accessary when iodine has achieved this primary purpose; and, with good management, there is no interruption to the cure.

From the absence of obvious syphilitic symptoms, these cases often find their way into our clean wards; and you have had opportunity of seeing three or four cases under my treatment in Clinical Ward during the last year or two. Some of you may remember a remarkable case there nearly two years ago, in a married woman, who afterwards became a nurse to the hospital. She had a very characteristic circular sloughing surface, just above the elbow; and, contrary to the more general singleness of the disease, there was evidence of its beginning at a second spot on the back of her hand, where there was firm, subcutaneous deposit, with slight redness of the skin. She had some remains of a node at the outer angle of the frontal bone. Under the use of iodide of potassium (gr. v. ter die) she recovered without an hour's interruption; and the incipient carbuncle, if I may call it so, on the hand, slowly retrograded, without any formation of slough. Another most characteristic case occurred in the person of a patient admitted July 23, 1850, with a sloughy cavity on the outside of the leg; she had resisted treatment which had been adapted to the general failure of her health, and, on account of her severe pain, had required night doses of opium. The ulcer had grown to very unusual dimensions, and was still growing. After the first day's use of iodide of potassium, she had neither pain nor any other inconvenience than that of keeping her bed till cicatrization was complete. Lately we have had in the same ward a case in which a similar progress of disease and a similar efficacy of medicine have been witnessed, but which I do not recite at length, as I did not see its commencement. If one might credit this patient's description, the large sore with which she was admitted, began as "several small lumps rising on the outer part of the leg, which burst, enlarged, and became confluent." I have not myself seen this method of origin, but I see nothing improbable in the statement. The advantage of the iodine was very marked, but so also was great benefit gained by the alternate employment of iron, after a first impression had been made on the disease by the specific remedy.

In conclusion, I may repeat to you, that this, to the best of my knowledge, is the only form in which the syphilitic cachexia tends directly and essentially to produce a gangrenous process. While speaking to you of the other forms of cachectical gangrene, I have endeavoured to illustrate that, though they certainly arose in venereal patients, their true origin was not the specific poison of syphilis, nor were the anti-syphilitic remedies eligible for their cure. While contrasting with them a form of disease which I believe to be distinctly syphilitic, and which is not amenable to such general measures of tonic treatment as suffice for the cure of the others, I am glad to have been able to point out to you the remarkable certainty of its cure (so soon as you have recognised its nature) under the well-known specific operation of iodide of potassium.

ORIGINAL COMMUNICATIONS.

THE UTERINE SOUND, OR BOUGIE.

By CHARLES HAYES HIGGINS, M.D., F.R.C.S.

Every one will admit, that there are two parties whom all lovers of truth must avoid: those who forcibly introduce novelties; and equally, if not more so, those who violently resist all attempts at new ideas, preferring to retain, often to re-introduce, even at the expense of all genuine fair-play, everything that is old, nay, the worn-out and the obsolete.

Alas! how frequently, in our own too jealous and quarrelsome Profession, do we witness the exhibition of such a miserable scandal! Should anything unusual be proposed, how many are found to condemn it unexamined,—how few to approach it with a desire to test it,—to learn whether it is a matter worth attending to!

"Accensus inquirere quid sit in causa."

Among many such instances, let us take one, viz., the conduct which has been exhibited with respect to the uterine sound, or bougie.

So few appear to have tested this little instrument, while so much has been urged of late against it, and so much off-hand obloquy has been attempted to be cast on it, as well by exaggerated descriptions of it, as by hard names applied to it, that I confess I feel surprised that some one occupying a prominent position, swayed by a simple love of truth and exactness, has not essayed to discuss, for the guidance of us humbler members of the Profession, in a calm, unbiassed manner, and in a spirit of candid inquiry, its merits or demerits, whichever they be.

I, for one, cannot think that the question has been settled by the violent abuse which has been heaped upon the sound and upon its inventor, however high some may regard the source whence these revilings date.

"If he says black's black,—if I have a humour to say it is blue, let that pass; if I have a humour to prove it, it *must be granted*," says *Petulant* in the play. Now I say, "*not positively must*;" and, since no one else seems disposed to enter on the subject, and "no man is so foolish but may give another good counsel sometimes," *sit mihi fas audita loqui*.

To answer the revilings or false inferences of prejudice on either hand, or to enter into purely personal controversy, forms no part of my purpose.

"The belief of some men," says Jacobi, "is always reason, nor can they recognise another's reason except in their own belief. They inquire not how he feels, perceives, observes, or infers, but only what his opinions are, and whether these agree with their canon or not, and that decides the matter." Now, as to the opinions of such, or of any other men, I shall hold myself perfectly indifferent. I desire to deal with facts, which are to me more weighty than men's conceptions.

"Fortia mallem quam formosa."

I propose, then, to inquire, in the first place, what the uterine sound, or bougie, is; secondly, for what class of cases, and under what circumstances, it is proposed to employ it; and, lastly, whether such an instrument is justifiable.

1st. What is the "uterine sound, or bougie?" As recommended by Professor Simpson, it is made of silver, or some alloy, such as the German silver, so tempered, as to possess due resistance at the same time that it is capable of being bent to suit different cases and circumstances. The stem is 9 inches long, and about the size of a No. 6 or 7 male sound, tapering in form and knobbed at its termination, the knob being an eighth of an inch in diameter; it is set in a flattened handle,—smooth on one side (the posterior) and roughened on the other,—enabling the operator at once to know the position and direction of the instrument. The stem is somewhat curved, (its flexibility admitting of almost any degree of bending with the hands,) and marked on its convex or posterior surface by various knobs and notches. The first mark (a knob) is placed at 2½ inches from the extremity, and indicates the average length of the uterine cavity; at 3½ inches there is a notch; at 4½ inches a double knob; and so on, a notch or a knob, placed alternately inch by inch, by means of which the operator is enabled, by feeling alone, without visual examination, to obtain the information he is seeking. Such is a brief account of the instrument that I

have seen Dr. Simpson invariably use, and of the one in my own possession. For a more detailed description of it I would refer to Dr. Simpson's original paper on the subject, in the *Monthly Journal of Medical Science* for 1813, p. 703, etc. And this, too, is the instrument which has been designated an "iron weapon!"—with what semblance or modicum of truth let the Profession judge. They who have so described it, have done so in direct and unmistakable violation of truth, or in a wilful and unpardonable ignorance of what they were decrying.

2ndly. Let us inquire for what class of cases, and under what circumstances, it is proposed to employ the uterine sound,—premising, that it is to be used with the patient placed either on her back or left side, as in introducing the speculum; one finger is then to be passed up to the os uteri, and with the other hand the sound is to be slipped along the inserted finger, and so up to and through the os uteri,—the depth of its penetration being at once ascertained by the point of the already inserted finger coming into contact with one or other of the irregularities or marks on its posterior surface already described.

It would be quite impossible, in a communication like the present, to instance all the circumstances to which I consider the sound to be applicable; nor is this at all necessary, for my object is not to write a treatise on it, but simply to draw general attention to what I conceive a very useful, but a misunderstood instrument. I shall therefore limit myself to the mention of some of the more common and prominent examples of its application, and such as I have myself been enabled to verify.

In the first place, then, I believe it to be not only highly useful, but an absolute *sine quâ non* in investigating the cause of certain forms of amenorrhœa, viz., where this ailment depends on an abnormally shortened and undeveloped condition of the uterus, frequently accompanying a corresponding want of development in the ovaries.

In a case which fell under my own care, the cavity of the uterus was $1\frac{3}{4}$ inches long. The patient had not, for many years, if ever, menstruated properly. She had never laboured under entire suppression, but suffered from great irregularity of the function as to time, quantity, and quality. She bore other marks of her condition, such as hair on the upper lip, and scarcely any development of the mammæ,—peculiarities, I believe, commonly attendant on such instances. For years this lady had been uselessly subjected to all sorts of powerful treatment, directed to a restoration of the suppressed function, without a suspicion of her real condition, and at the expense of her general health. After the information obtained by the sound, the indication was to rescue her from all these drastic proceedings, and to substitute, for the former treatment, scarcely anything beyond an imitation of the absent function, in the shape of periodic leechings. She improved, but unfortunately, within three months, sank under an attack of acute pneumonia. What amount of relief she might ultimately have received I cannot pretend to say, as this was the only instance of this kind of amenorrhœa which has fallen under my observation,—perhaps none; but I saw quite enough even here to feel regret that the sound had not been much sooner used; and I am satisfied that in such cases alone its employment is very material. It enabled me, at any rate, to arrive at the "*fons et origo mali*," which had not hitherto been discovered, and to adopt what I think I may fairly call a rational mode of treatment, in lieu of the useless and pernicious one formerly pursued; from which change alone my patient derived as much relief, in a malady of many years' standing, as her untimely death permitted, although the former treatment appeared to have been *secundum artem*.

The following case of dysmenorrhœa, from occlusion or stricture of the os internum uteri, forms a contrast with the case just related, and shows the use of the sound in another class of maladies:—

A married woman, from Whitehaven, about three years since applied to me in consequence of dysmenorrhœa of six years' standing, for which she had been constantly under medical care. She had never been pregnant, though a long time married. By the sound, I ascertained the existence of a constricted condition of the os internum, which, by a repetition of sponge tents, I succeeded in opening up. The menstrual function was within a short time regularly and completely restored; and, according to a voluntary letter from her some time afterwards, I learned that it had not again been faulty.

See *Medical Times*, under date of October 25 and December 6, 1851, for cases of a similar description, where no obscure practitioner like myself, but one of the leading accoucheurs of the day, (Dr. Rigby,) had recourse to the uterine sound for diagnostic purposes, with what advantage let the perusal of these cases decide.

I shall probably be met with the objection, that such cases have been successfully treated long before the invention of the sound. It may be so; so have cases of pneumonia before that of the stethoscope; and it would show an equal amount of ignorance or of prejudice to oppose—after such cases as Dr. Rigby has reported—the one instrument as the other.

Here, then, we have a class of cases frequently brought under the notice of those engaged in obstetric practice, productive not only of great disturbance of health, but constituting, I believe, the most common cause of sterility. If the use of the sound were limited to these cases alone, I cannot conceive how any dispassionate observer could doubt its vast usefulness. Nor can I understand how such cases are to be diagnosed without some such instrument as the sound; and I would put it to those who have treated such cases prior to and since the introduction of the sound,—who have, in short, fairly tested this instrument in such cases,—whether they do not now more frequently and more rapidly relieve them than formerly.

But probably in no class of cases is the employment of the instrument under consideration more necessary or more satisfactorily shown than in the various displacements to which the uterus is liable. Some, indeed, have designated these displacements, "imaginary retroversions, or backslidings of the womb;" nevertheless others, whose wit has not been sharpened by morbid peculiarities, do admit of their existence; and on them I would urge an impartial examination of this sound means of diagnosis.

I quote the following case to show, that displacements sometimes occur without a suspicion of their existence, rather than to exhibit the employment of the sound, which I propose to prove by those which succeed it.

Some years since, a relation of my own laboured, for at least a year, under complete disturbance of the general health, accompanied by diarrhœa, vomiting, and other signs of aggravated dyspepsia, for which she was unsuccessfully treated in various ways. Believing, with her medical attendants, (I was then a student,) that she suffered from a complicated stomach complaint, I advised her consulting the late Dr. Wilson Philip, to whom I detailed her case myself. He at once suggested, that her ailments proceeded from a stricture of the rectum, and requested to have that point cleared up. The late Sir Charles Bell was now called in, and discovered, not, indeed, a rectal constriction, but what in effect was the same, viz., a displacement of the womb on the bowel, and recommended the case to be placed under the care of Dr. Merriman, who confirmed his diagnosis. Appropriate means were adopted for the support of the womb, with speedy relief to all the urgent symptoms, and a restoration to health.

Can any one doubt that, in this instructive case, the uterine sound, early employed, would have anticipated much of the injudicious treatment to which the lady was subjected?

When in the United States, about two years since, I was requested by a very intelligent practitioner, Dr. Hiram Clarke, of Cincinnati, an Alumnus of the Pennsylvania University, to see a case which had given him great anxiety and trouble. Believing, from the symptoms, that dislocation of the womb existed, I introduced the sound, and discovered a retroversion. Of this I convinced Dr. Clarke, by making and unmaking the tumour, as it were, while his finger was introduced into the rectum,—a proceeding for which I would offer the excuse, that to him the whole subject was new, and the instrument only known by report. I presented him with the one we had employed, and had from him, subsequently, unmistakable evidence of the assistance he derived from it in other cases.

About three years ago, I was consulted by a lady from Penrith, who had been the subject of anomalous and distressing symptoms for six or seven years, for which she had sought the advice of several practitioners in London without relief. The most unpleasant symptom in her case was inability to empty her rectum when up, and the involuntary and unconscious escape of its contents at other times; in fact, a loss of power and sensation in the lower bowel, which

had existed a portion of the time she had been ill, and much increased of late. I need scarcely add, that there was a complete inability to move about, not only from a dread of doing so, but also from a sense of weight and fulness about the pelvis. Suspecting a displacement of the womb, I examined first *per vaginam*, and, on finding the os uteri abnormally forward, and near the pubis, I passed my finger, unconsciously to her, into the rectum, and through that bowel perceiving a tumour, I stated my belief that a retroversion of the womb existed; and, obtaining permission, introduced the sound, and was enabled, not only to confirm my opinion, but also to discover an enlarged and hypertrophied condition of the organ. By means of the sound, I readily, at a subsequent visit, replaced the womb, and maintained it *in situ* by an appropriate pessary. She was also put under medical treatment. The enlarged state of the womb gradually, and to a considerable extent, disappeared, and the improvement of the general health and comfort of my patient was as rapid as remarkable. Within three weeks after I commenced the support of the womb, she, who for years had been almost confined to the house, was enabled to walk two or three miles. She still wears a pessary without inconvenience, but one of a simpler kind, (one of Dr. Graham Weir's,) for there is yet a disposition to a falling forwards and downwards of the uterus. The function of the rectum has not been restored, but is somewhat improved, and she can now, by a daily use of enemata, clear it out, and then remains comfortable for the rest of the day, and is capable of taking as much exercise as most ladies of 55.

Since my return from America, she has been to see me; and I rejoice to add, her improvement is progressive. I leave this remarkable case to convey its own moral.

It will be admitted, that one of the greatest difficulties experienced in the practice of medicine, arises from the similarity which frequently exists in the signs and symptoms of various and differing maladies, often reducing the differential diagnosis of such maladies to the narrowest possible limits. That the obstetric physician has had quite his share of such perplexities to contend against, none, I think, will deny. With how much gratitude and satisfaction, then, should he hail every additional means of diagnosis? Now, without claiming for the uterine sound the power of clearing up every obscurity, I do believe,—and I wish others to test my remarks,—I do believe it has in many instances, and will yet in many more, assist materially in dispelling the difficulty which exists in discriminating between dislocations of the womb and various pathological conditions of the organ itself, or of the parts adjacent.

For instance, it forms an important element in distinguishing between internal uterine polypi and inversions of the organ,—a point of diagnosis admitted to be difficult, and no doubt is so, judging from the many and serious errors which have been committed. Here the depth to which the sound would pass within the os uteri would indicate the difference. The sound readily exhibits the difference between tumours situated in the posterior wall of the uterus, and retroversion, by the direction which the instrument takes; for instance, if it pass with its point backwards, and through the centre of the tumour, it shows at once that this swelling is the result of displacement, and is not an addition to the organ.

Again, in the early stages of ovarian disease, the enlarged ovary extends into the space between the uterus and the anterior wall of the rectum, and may give rise to the impression of a retroverted uterus; and, as far as I can judge, these two conditions could not be distinguished without the means of ascertaining by the sound—1st. That the uterus is in its normal situation; and, 2ndly. That the organ can be drawn away from any existing tumour.

Once more, I conceive that it would be impossible to distinguish clearly a thickened condition of the anterior wall of the rectum from retroversion of the uterus, unless we could, by means of the sound, convince ourselves of the normal condition and situation of the latter organ.

The last point to which I shall refer is, the use of the sound in furtherance of the ends of justice.

Some years since, a woman was apprehended in Scotland on a charge of infanticide. The accusation, however, could not be brought home to her, from the absence of all very decided proofs of her recent delivery. Two or three medical men examined her, and reported doubtfully. Another practitioner was consulted; and this one, by means of the sound, ascertained the usual enlarged condition of the womb after childbirth, and this fact led to further investigation, which ended in clearly establishing her guilt. I report the case from memory.

In fine, could we introduce a finger into the cavity of the uterus, I believe all will admit that we should be justified in doing so, and that we should thereby be enabled to arrive at a correct opinion of many morbid conditions of its interior, of which, until lately, we have been thoroughly ignorant, and even now could know little but for the introduction of the uterine sound into practice, which may, without any great stretch of imagination, be regarded as a prolonged finger.

I do not profess to have followed out the subject to the end. I might have spun out my remarks into a greater length; but "I think a little plot of ground thick sown is better than a great field which, for the most part of it, lies fallow." But, granting that I have shown that the uterine sound does answer the purposes for which it was intended, a question still remains for consideration, and that is, "how far the end justifies the means,"—whether it were not better for our patients that many of their maladies should remain undiscovered, and, *par conséquence*, unrelieved, than that they should be subjected to that "iron weapon," "that dangerous weapon, called the uterine sound, or poker?"

Now, it appears to me, that the answer to this question is contained in the ordinary use of the vesical sound. Had we been called upon, for the first time, to insert an instrument into the interior of deeply-seated organs, then something like a specious objection, or at any rate hesitation, might be exhibited in admitting it into practice; but with the universal employment of vesical sounds of all sorts, sizes, shapes, and materials, staring us in the face, with what semblance of truth are we to condemn, as some have done, and in no measured terms, the use of a similar instrument in another organ. The bladder, like the uterus, is a pelvic organ, deeply situated, lined, like it, by a mucous membrane, but one far more sensitive than that of the uterus—liable like the latter organ to various changes and conditions of its interior—to arrive at a knowledge of which, time out of mind, metallic instruments have been used; and without the employment of which it is believed many of these conditions could not be ascertained. I would, therefore, in all fairness, inquire why every tyro in the Profession should be permitted to thrust a firm metallic instrument into the bladder through a long and complicated passage like the urethra, and the accoucheur held up publicly to scorn and condemnation for a judicious use of a parallel instrument constructed of a softer material?

That the uterine sound should have proved dangerous with Dr. Robert Lee I cannot pretend to explain, and though it excites "my special wonder," I will not attempt to gainsay; for he has almost said as much, at any rate he has condemned it and its inventor in sufficiently strong terms, and I cannot bring myself to believe (especially when I reflect on the attitude Dr. Lee has always assumed towards Dr. Simpson) that his condemnation is not genuine, but second hand; that he has not himself experienced danger with it, but, taking his opinion of it from the statements of others, he has decried what he had not himself proved to be objectionable.

That it has also proved dangerous in the hands of certain of his friends, I will not question, for it is a universal law, that one portion of matter will impress other matter.

I do not, however, quarrel with these gentlemen for their views on the subject. I would simply say to them, "Pray you, use your freedom, and so far, if you please, allow me mine to hear you only, not to be compelled to take your moral potions."

That the uterine sound is a weapon utterly useless and dangerous in all hands, I consider an impression based on prejudice or ignorance of its use.

I can solemnly declare I have used it for years, and seen others use it, and never yet met with any one instance of mischief arising from it, or of any amount of irritation beyond what is frequently observed in passing the vesical sound—and quite as transitory; nor can I comprehend how, in unprejudiced and intelligent hands, the uterine sound can do mischief. The only possible evil I can conceive of from its employment is, that, if used at an unsuitable period, it may produce early abortion—a risk that could not occur to a careful practitioner, and might be always avoided by limiting its use to a post-menstrual period. That it has ever pushed the uterus out of the pelvis in a living subject, I believe to be

an anatomical fallacy—a myth—the offspring of some peculiar psychological condition which I cannot fathom.

Doubtless, I shall be twitted with being a partisan of Dr. Simpson's. Dr. Simpson needs no such advocate as myself. The name of his partisans is Legion; but, nevertheless, I will at once blunt the intended venom of such a charge by freely and openly avowing that, in this matter, I do side with Dr. Simpson, for I believe him to have had a great amount of unmerited abuse heaped upon him, and to have been on this, and many other matters, most grossly misrepresented. Moreover, I honour him for his uncommon professional genius; his philosophical spirit, and his unwearying endeavours to construct his practice on a physiological basis.

I respect him, too, in that, though probably more abused, and more offensively abused than any other man in the Profession, I never heard him, during a rather long intercourse with him, give utterance to a single ungentle expression against any man; and I believe conscientiously, that if any improvements are made in obstetric science and art—and who shall say that none are required?—to Dr. Simpson mainly shall we be indebted for them. Be assured, good reader,—

> "This man of music hath more in his head
> Than mere crotchets."

Birkenhead, Cheshire.

P.S. In the last number of the *Medical Times and Gazette*, "M.D. Londin." describes the bulb of the uterine sound as varying "from a quarter to half an inch in diameter." Now, although I am altogether averse to noticing the communications of anonymous correspondents, I would venture to ask, lest "M.D.'s" misconceptions should extend to others, where and when he has seen such an instrument? He might with just as much truth describe Liston's amputating knife as *four inches wide and four feet long*. C. H. H.

ON THE TREATMENT OF POLYPI OF THE EAR.

By JOSEPH TOYNBEE, Esq., F.R.S.,

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(Continued from page 106.)

GELATINOUS POLYPUS.

Next in frequency of occurrence to the vascular polypus is the one which has been termed the gelatinous polypus. This name has been given to it from the soft jelly-like appearance presented by its free portions, and from the similarity of their general aspect to the gelatinous nasal polypus. Careful and minute examination, especially when aided by the microscope, does not, however, confirm the propriety of the above designation; on the contrary, as it will be seen in the course of my observations, the term fibro-gelatinous polypus would be applied to it with much greater propriety, and to the variety hitherto called the vascular polypus perhaps the term cellular will be most fitted.

STRUCTURE OF THE GELATINOUS POLYPUS.

This growth generally increases to a large size. I have specimens in my collection which vary from being as large as the last joint of the little finger to the size of a small nut. Sometimes this polypus has a single root and body, but more commonly two or more bodies have a common base. The root, which is attached to the wall of the meatus, is generally not larger than from a line to two lines in diameter. Examining the polypus as it approaches the orifice of the meatus, it will be found that, attached near to the root, are numerous small rounded growths, very much like to delicate granulations; these appear to be the rudimentary growths, confined to their small size by the pressure exercised upon them by the walls of the meatus and the large expanded part of the outer portions of the growth. Approaching the orifice of the meatus, the polypus assumes a globular form, and consists of from one to as many as six or eight rounded heads. When these heads are numerous, they present pedicles, varying in length from a quarter to half an inch, by which they are connected to the root. The surface of this polypus is smooth, and it is constituted by a layer about a quarter of a line thick; this is separated from it by maceration, and it consists of cells having every resemblance to those of the epithelium covering the buccal mucous membrane. This layer of epithelium is as thick and white as ordinary writing paper, and, when detached and floating about, it keeps the forms of the polypus from the surface of which it has been separated. The interior of the gelatinous polypus is composed of corpuscles and fibrous tissue; the proportions of the two elements vary in different specimens, but the fibrous tissue generally predominates. The corpuscles are of a rounded form, and they vary both in size and shape. In a specimen which was a good example of this variety of polypus, as it is generally presented to the surgeon (it being white and soft, so as to be easily compressible by the thumb and finger,) I found that these cells varied in shape from being quite round to an irregular oval,—from being the size of a blood corpuscle to one half or even one quarter the magnitude of that body,—the greater number appeared certainly smaller than the blood disc; but they presented every variety of size between that of a blood disc and a fine granule, and there was very little symmetry in shape or size even between those that were nearest to each other. These cells are not generally in close contact, but they are separated by a delicate gelatinous substance, which is sometimes quite transparent and structureless; in other parts, where the polypus is resisting, these cells are separated by delicate, wavy bands, having the appearance of fibres, and to the surface of these fibres the cells are observed to adhere. In some parts, these wavy, gelatinous-looking fibres form almost the entire substance of the polypus; the rounded cells being scattered very sparingly, in other parts, these fibres are absent. The wavy fibres run in the long diameter of the polypus; they possess considerable toughness, and, although they are easily separated from each other, so that individual fibres can be isolated, they cannot be torn across without the use of considerable force. The single fibres are extremely fine; so that, when they are separated from each other, they have the appearance of transparent lines, whose diameter varies from half to a quarter of that of the blood disc. Interspersed through the substance of the polypus were many spindle-shaped crystals. Upon the application of acetic acid, the fibres became swollen, and assumed a confused, gelatinous appearance, and lost all their fibrous character; the corpuscles were also converted into a similar mass, in which, however, a large number of granules were observable. The action of the acetic acid also brought into view a large number of fine, spindle-shaped crystals, some of which only had been previously observed. The gelatinous polypus sometimes attains to so great a degree of hardness, that it is with difficulty cut through by a pair of scissors; this peculiar condition appears to be produced by the increase in quantity and solidity of the fibrous tissue, and in the diminution of the quantity of corpuscles, and in the absence of the gelatinous matter between them. It has been already stated, that the vascular polypus is composed of rounded cells; these, however, differ very much from the cells of the gelatinous polypus, in being all of nearly the same size and shape, and in being larger than those previously described. The cells of this polypus do not appear to be separated by any substance, but they are agglomerated together, and form the entire mass of the polypus. The exterior, which is smoother than the gelatinous polypus, and which is always covered by its secretion, is composed of a layer of elongated epithelial cells, which are frequently terminated by ciliæ; the latter are often seen in active motion for a considerable period subsequent to the removal of the portion of polypus which they cover.

TREATMENT OF THE GELATINOUS POLYPUS.

The difference in the structure of the two kinds of aural polypi naturally prepares the surgeon to expect that the treatment requisite for their removal would also differ. This is undoubtedly the case. The use of the potassa cum calce, which has proved of so great value in the destruction of the vascular polypus, is of but little service in the treatment of the gelatinous, or, more properly speaking, the fibro-gelatinous polypus. The escharotic produces but comparatively slight effect upon fibrous tissue, and the only plan of removing it is by extraction. For this purpose, the best instrument is a pair of ordinary dressing-forceps, the ends of which should be reduced in size, so as not to be larger than from a line to a line and a half in diameter. These forceps should be introduced into the meatus to the distance of half or three quarters of an inch, and the polypus

seized as near as possible to its roots; the forceps should then be used as a lever, the outer part of the ear being the fulcrum, and the polypus turned out of the cavity. But little force is required, and, as a general rule, the diseased growth is removed without difficulty in an entire state. Upon examining the meatus after its removal, the surface to which it was attached is distinctly discernible, and, for a short time, there is a slight oozing of blood from it. In some cases portions of the root of the polypus remain, but they do not, generally, require any further treatment, but gradually atrophy and disappear. On the contrary, if any of the small globular bodies remain attached to the root, they rapidly increase, and the diseased growth has again to be submitted to operation. The removal of the fibro-gelatinous polypus is generally productive of relief, not only to the unpleasant head symptoms, which are caused by its pressure on the contents of the vestibule, but to the diminished power of hearing. The improvement in the power of hearing does not, however, as would be supposed, take place at once; on the contrary, it not uncommonly occurs that there is, at first, no increased power of hearing, but that it gradually and very slowly improves. This may, perhaps, be accounted for, from the circumstance, that the polypus has for a long period exercised considerable pressure on the membrana tympani, or, where that structure no longer exists, upon the tympanic ossicles, and that these organs only slowly return to their natural state.

GELATINOUS POLYPUS IN THE LEFT EAR FOR SEVEN YEARS; IN THE RIGHT EAR FOR ONE YEAR—NOISES IN THE RIGHT EAR—GIDDINESS UPON PRESSURE OF THE POLYPUS—CURE BY EXTRACTION, FOLLOWED BY THE APPLICATION OF ALUM AND CHLORIDE OF ZINC.

Case 4.—Harriet Wenlock, aged 38, a washerwoman, strong, rather stout, and in good health, with the exception of the symptoms produced by the polypus, consulted me in the commencement of April, 1850. She stated, that seven years previously, without any other symptoms, discharge issued from the left ear, and it has never disappeared; shortly after the appearance of the discharge a rounded body was observed at the orifice of the ear. About a year ago the right ear began to discharge, and there soon appeared a swelling at the outer orifice. She complains of great noises in the right ear; these vary much; sometimes they appear like a humming, at others like a tinkling of a bell, then as if it were loudly ringing. When the surface of the tumour of the left ear is pressed upon she feels giddy, and if it is continued, she loses her senses and falls. At present, and for a considerable period has been so hard of hearing, that she requires speaking to very loud close to the head. Upon examination of the right ear, a round, pale-coloured polypus, more than half an inch in diameter, was observed to protrude from the orifice of the meatus, and below it was another growth about half the size. At the external meatus of the left ear a rounded body was observable; this was not more than a line in diameter, and it did not extend beyond the orifice. Not finding any symptoms which indicated an affection of the bone, I thought it better at once to remove the polypi, and selected the right ear to commence upon. The diseased growth was removed with the greatest ease by the use of the dressing forceps, in the manner above described; the patient suffered only a slight but momentary pain, and there was a very trifling oozing of blood. Upon examination after its removal, the polypus was found to consist of the two rounded heads already noticed, each having a second mass about half the size continuous with it, and extending nearly as far as the root; the latter was very narrow, not being more than a line or a line and a half in diameter. The surface of the expanded part of this polypus was found to be covered by flat scales, like those of epidermis, but nearer to the root, elongated cells, armed with ciliæ, were also distinguished. The rounded parts which were exposed to the air were smoother and whiter than those which were concealed, the latter presenting a somewhat rugous surface. On April 22, a fortnight after the removal of the polypus, upon examination, the quantity of the discharge was greater than usual, and there was observed to be a rounded growth near to the membrana tympani, as if the roots of the polypus still remained; to this substance a solution, composed of half an ounce of alum to two ounces of water, was ordered to be applied thrice daily. The polypus was removed from the left ear; it consisted of a pedicle, a body, and three rounded heads, two of which had been seen at the orifice of the meatus during life.

April 29.—The power of hearing is improved; has had slight pain in each ear, also some giddiness. The discharge is less abundant, but still of an offensive odour. In the right ear the remnant of the polypus is seen attached to the upper part of the meatus, near to the membrana tympani; in the posterior part of the latter an orifice was observed. In the left ear the roots of the polypus appeared to fill as much as one half of the meatus. The drops of the solution of alum to be continued.

May 6th.—*Right Ear.*—The discharge has ceased; the hearing has improved, and is much better after blowing the nose. The polypus has wholly disappeared; the mucous membrane of the tympanum is seen through the orifice of the membrana tympani; it is thick and red.

Left Ear.—The roots of the polypus are much in the same state.

May 13.—The roots of the polypus in the left ear remain as a week ago. Applied the chloride of zinc to their surface.

May 27.—Left Ear.—Polypus smaller; again applied the chloride of zinc.

June 24.—Discharge from left ear gone. The polypus much diminished in size. Air passes through the left membrana tympani. The solution of alum was continued; and in a fortnight the polypus had wholly vanished.

GELATINOUS POLYPUS CURED BY EXTRACTION—HEARING POWER IMPROVED.

Case 5.—J. W., Esq., aged 24, a medical student, pale and not strong, consulted me on the 21th of October, 1851, on account of a very considerable degree of hardness of hearing, so that he was obliged to be spoken to at a distance not further than a foot from his head; he also had an abundant discharge from the left ear. The history of the case was, that twelve years ago he had an attack of porrigo, for which the head was shaved; during this attack, he was very deaf in both ears; but he quite recovered. A year ago he became slowly dull of hearing in the right ear; and for eight months the left ear has been gradually losing the power of hearing. Has had pain in the left ear lately, attended by discharge; the latter varies much in quantity, and has a very offensive odour. Upon examination, the hearing distance of the right ear with my watch was only half an inch; the surface of the membrana tympani was dull, and its substance opaque.

Left Ear.—Watch only heard when pressed upon the ear. A polypus filled the meatus and extended as far as the orifice of the meatus. This polypus was removed by the forceps in the manner already described, and the power of hearing slowly improved.

GELATINOUS POLYPUS REMOVED BY FORCEPS, AND POTASSA CUM CALCE APPLIED TO THE ROOTS—CURE.

Case 6.—Miss E. H., aged 26, consulted me on April 4th, 1851, on account of a discharge from the right ear. The history of the case, as detailed to me, was, that at the age of 16, she had an attack of scarlet fever, accompanied by pain in both ears, but especially in the right. The pain in the right ear was followed by a discharge which has continued up to the present time, with the exception of one occasion, on which it disappeared for a fortnight, when the pain was much increased. Upon examination a polypus of a leaden hue was observed to project from the orifice of the meatus; it was stated that this growth had been seen there during the four months preceding the application for advice, and that pressure upon it always produced giddiness. This polypus was found to be attached to the posterior and inferior part of the meatus, near to the membrana tympani. This growth was removed by means of the dressing forceps, and, as the roots had a tendency to increase in size, the potassa cum calce was applied once, and the growth was effectually destroyed.

[To be concluded.]

CASES OF DISEASED BONE.

By BRANSBY B. COOPER, Esq., F.R.S.,
Senior Surgeon to, and Lecturer on Surgery at, Guy's Hospital.

[Concluded from page 159.]

ENCHONDROMA.

A married lady, aged 40, applied to me, in March, 1851, for advice respecting a tumour on the dorsal surface of the lower extremity of the right radius. From the age of 15 she had suffered from weakness in the wrist, and about twelve

or fourteen years since first remarked a swelling, which has gone on gradually increasing until it formed the tumour of which she was the subject. The swelling was close to the wrist-joint, taking its rise, apparently from the epiphysis. It appeared, from the account given by the patient, that from the very first the swelling was hard, apparently bony; it has always been painful, particularly after the hand had been much used and had become fatigued. When this lady came to me, the tumour was about as large as a small orange, somewhat nodulated on its surface, and of unequal hardness, its sides being evidently bony, while, in the centre, a certain degree of fluctuation could be distinguished, as if a fluid were confined within a strong membrane, like parchment, pressure producing a kind of crepitation. The general character of the tumour suggested the idea of its having commenced as a ganglion, which had become partially ossified. The extensor tendons of the fingers and wrist did not pass over the tumour, nor apparently around its base; the inference, therefore, was, that they took a course beneath it, which would be impossible if the growth had commenced in the extremity of the radius, unless it formed a kind of arch over the tendons.

Fig. 1.

Having carefully examined the swelling, and inquired into the whole of the circumstances attendant upon its growth, I came to the conclusion, that it was an enchondroma, partly converted into bone, and not of a malignant character. There could be no doubt but that the tumour ought to be removed; the only circumstance calculated to create some hesitation being the proximity of the disease to the wrist-joint, the capsule of which might be endangered. I considered, however, that the swelling ought to be removed, as it would, in all probability, be easy to avoid injuring the joint. I informed the patient that I thought it necessary that the tumour should be extirpated; but, as it caused her no very great inconvenience, and the pain which she suffered was not severe, she would not immediately consent to the operation. I continued, however, to see her at intervals during the summer; all this time the tumour was rapidly increasing; and, indeed, every month its growth seemed to be accelerated. It may be mentioned, that some four or five years before the patient consulted me, a surgeon in the country, who had evidently believed this to be a ganglion, had passed a seton into the tumour, a proceeding which seems to have produced no relief, but which, on the contrary, appears to have very much excited the growth of the diseased mass. After much consideration the patient determined to submit to the operation. She was perhaps somewhat influenced in her decision by the fact, that Sir Benjamin Brodie, to whom the wrist had been shown during the autumn, had completely corroborated my opinion of the case, as to the necessity for the excision of the tumour. Be this as it may, the patient made up her mind to submit to the operation, and, accordingly, on the 10th December, 1851, I removed the tumour. The operation was performed under the influence of chloroform. There was nothing remarkable in the operation itself, which was not attended by any difficulty. An incision about four inches in length was made, commencing just above the tumour, extending directly over it, and terminating just below the wrist joint; the skin was dissected back towards each side, so as to completely expose the tumour, which was then removed from its attachments to the radius. This was not, however, achieved without some little difficulty. In some places it was attached to the bone by processes of ossification, which extended to its own mass, and these points of attachment were very firm, and required considerable force to cut through them. The bleeding was but slight, and stopped as soon as the skin was brought together. The edges of the skin were kept in contact by three small sutures.

At the time of the operation the size of the tumour had very much increased beyond what it was when I first saw it nine months before; it was now not less than two and a half inches in diameter. When removed it was found that it had pressed the tendons of the wrist and fingers to either side, and that it had taken its origin from the ulnar side of the radius.

My object, in relating this case, is not so much with reference to the seat or physical character of the tumour, or the circumstances under which it grew, as to the composition and structure of the mass it formed, as I diagnosed at first it proved to be enchondroma; but there were peculiarities in its structure which render it an object of considerable interest in a pathological point of view. The growth was made up chiefly of cartilage cells in a state of rapid development, being so far a true enchondroma; in some parts there existed a collection of peculiar compound cells, containing a large number of nucleated cells, many of them in a state of change, undergoing spontaneous division, the absorption of the cell-walls being also in progress. In some parts of the tumour, the deposition of bone corpuscles had commenced, and in others had gone on until considerable patches of ossification had been completed. This ossification had taken place in the walls of the compound cells, so that in many cases small cysts of true bone had been formed. These cysts or cavities contained a gelatiniform fluid, in which floated oval cells of large size, full of minute granules, similar to those found in the thickened fluid of ovarian cysts, and sometimes in the gelatinous fluid of inflamed bursæ.

Fig. 2.

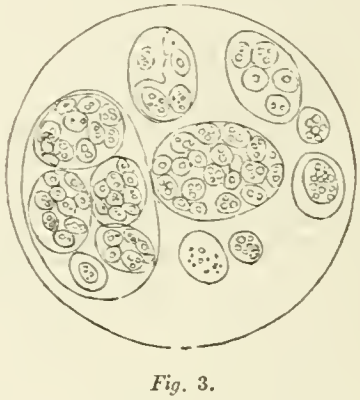

Fig. 3.

Fig. 2 represents the appearance of the compound cells under the microscope; *Fig.* 3 that of the cells and granules contained in the gelatinous fluid. In this tumour the process of ossification was evidently progressing with considerable rapidity, and it is probable that it would have ultimately extended to the whole of the mass, converting it into a kind of congeries of bony cavities or cysts.

From the character of the abnormal development, there is evidently nothing to fear in the form of malignant disease, and there is also reason to believe, that, as the diseased mass is removed, a healthy action may be re-established in the parts, and that, wanting the irritating stimulus to secrete and throw out the constituents of the abnormal growth, there will be no tendency for the disease to return.

The microscopic examination of the tumour was made by my friend Mr. Quekett.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

By HENRY SMITH, Esq., F.R.C.S.

(Formerly House-Surgeon to the Hospital.)

FUNGOID TUMOUR OF THE CHEST.

There is at present in this hospital a most remarkable instance of a tumour presenting all the characters of malignant disease; and where the patient, instead of getting rapidly worse from its effect, has appeared during the three months she has been an inmate, to have improved considerably in general health, notwithstanding the persistence of the disease, and the occurrence of circumstances which generally have a tendency to reduce health to a great extent.

The following are some particulars of this curious case:—Mary Ann Scanlan, aged 14, was admitted into King's College Hospital, Nov. 10th, with a large swelling situated in front of the left axillary space. She has lived in Greenwich. Her mother is quite healthy; but her father died of what appears to have been a malignant growth in the groin, which was removed, but subsequently returned and caused his death. About two months ago the patient observed a small lump in the left axilla, which increased very rapidly up to the present time, particularly during the last five weeks. When she first observed the swelling, she was in good health; but since that time she has been losing flesh very rapidly. On admission, she was wretchedly emaciated and very pallid, thus causing the tumour to stand out in bold relief; this being a large, smooth, but hardened mass of a conical shape, and considerably larger than the two fists, occupying the whole of the left axilla, and extending backwards as far as the under surface of the scapula, to which it appears to be attached; anteriorly it projects from the axilla, to within an inch and a half, or two inches of the sternum, reaching as high as the collar-bone, and nearly as low down as the nipple of the left breast. It was quite immoveable, and had a somewhat elastic feel. It had the usual appearance of a fungoid tumour, and the enlarged veins over it were conspicuous. The pain was excessive when it was handled; and indeed there was a persistence of a severe lancinating pain at all times in the tumour, more especially during the day. The surgeon in attendance upon her had, a few days prior to her admission, made a puncture into the tumour, and evacuated nothing but blood. Mr. Fergusson made a careful examination of this case, and gave his opinion, that it was a fungoid tumour; but that, from the nature and connexions of the mass, it was by no means an advisable thing to attempt any operation; and as the patient was in such a wretched condition of health, she was ordered to take good nourishment, including wine and cod-liver oil.

After she had been in the house ten days, the health of the girl had greatly improved; the tumour, however, appeared to be increasing in size, and around the spot where the puncture had been made there was considerable redness, and an appearance as though it were about to ulcerate. Cramps in the arm annoyed her. The sensation of the arm and hand was much modified, in consequence probably of the pressure of the tumour on the axillary nerves.

On the 13th of December one of the dark patches on the surface of the tumour gave way, and a large quantity of blood escaped, —the nurse thinking that at least a pint came away. The house-surgeon was sent for, and applied gallic acid, which entirely restrained the bleeding. She did not seem to have suffered much from this loss of blood. On the contrary, her improvement, which had before commenced, steadily progressed,—she became much plumper, and got excellent spirits,—the tumour decreased in size, and, although the bleeding has occurred on other occasions, the girl, who is at present in the hospital, is in a much better condition of health than when she first came in, although there is a profuse discharge from the tumour.

At the latter end of January the disease put on a different aspect. From the breach of surface which already existed, an offensive, sanguinco-purulent discharge took place, and the tumour evidently lessened in size. The patient herself suffered considerably more from constitutional disturbance, and there was a great deal of pain in the situation of the disease. Poultices were applied to the tumour.

Feb. 4.—Still continues very ill. She refuses to take her food. The discharge from the tumour is exceedingly fetid, of dark colour, and in great quantity, saturating everything that is near the tumour.

Feb. 7.—This day a fungous-looking mass protruded through the opening at the posterior part of the tumour, of a dark reddish appearance, and, indeed, on close examination, looking very much like a mass of fibrin. The substance continued to protrude, and on the 9th it had become so much detached from the tumour that Mr. Fergusson removed it without difficulty by means of a pair of forceps. On examination, it appeared to consist of fibrin. Mr. Fergusson made the remark, that it was very similar to the laminated mass which is found inside an aneurismal sac, and now his opinion was entirely changed as to the tumour having been malignant in its nature.

On Feb. 12, while the nurse was washing the diseased parts previous to applying another poultice, a large mass of the same nature as was before removed came away, leaving a large wound from which it had escaped. The mass was larger than an egg, irregular in shape, flaky, and capable of being torn into laminæ. On a section being made, there were found to be cells of considerable size, which were filled with a thick, dark mass, somewhat resembling half-coagulated blood. Dr. Henry Monekton, of the College of Surgeons, examined it carefully under the microscope; and I cannot do better than give the result in his own words:— "It is no tumour, but a mass of fibrin, blood-corpuscles entangled in some parts, no other tissue being mingled with it. It would appear to have been slowly effused, being laminated, and having a somewhat fibrous appearance both to the naked eye and beneath the microscope. The effusion would appear to have been intermittent, the several parts having different degrees of consistence, and forming several masses more or less globular."

Since the last portion was discharged, there has been no appearance whatsoever of tumour, the chest has become natural in shape, and the scapula is no longer distorted from its usual position; there is a large, healthy-looking wound in the axilla, from which there is but a moderate discharge, and the girl herself is again getting into fair condition.

It is not very often that one meets with a case which presents features of such great interest to the pathologist and to the practical surgeon; it is one, indeed, which is replete with instruction as well as interest, for it demonstrates the necessity of caution in giving a decided opinion as to the real nature of a tumour which has the appearance of being malignant. In all cases of doubt and difficulty, the surgeon should be excessively slow and diffident in making up his mind, or, at all events, in letting others know his opinion as to the nature of a disease; but when it is a question as to whether a tumour is malignant or not, this necessity for caution obtains to a greater degree, inasmuch as the carrying out of some important practical measure—as a serious operation—may depend upon the opinion which is to be given. In the case in question, there can be no wonder that the disease turned out to be different from what it was considered to be. When the patient was first sent up to the hospital, there were all the indications of malignancy in the tumour; and, in fact, the intelligent surgeon who had sent her up (Mr. Bradley, of Greenwich) had supposed that Mr. Fergusson would consider it proper to extirpate the tumour by the knife. This gentleman and all those who saw it considered that the disease was malignant in the first instance. In some clinical observations which Mr. Fergusson made in reference to it, he stated, that he did not operate because he considered the tumour to be a malignant one, and also because the child was in such a wretched state of health that she seemed unequal to undergo an operation. After the patient had been in the house a short time, certain changes took place which made him hesitate as to his opinion of the tumour being malignant,—it began to diminish in size, and the patient herself rapidly improved in her appearance. She became comparatively so fat that he looked upon it as one of the most remarkable features connected with the case, more especially if the tumour really were malignant, for we generally find, that when malignant disease is present there is gradual wasting, and no tendency to improvement in the general nutrition, even under the most favourable circumstances. When the diseased mass protruded, he considered that the substance was entirely different from the ordinary fungus which is seen in malignant tumours, but that it was more like the coagulated blood found inside an aneurism; and he then considered that the disease was not malignant, but that the swelling was formed of effused and coagulated blood. This had turned out to be the case, but how the tumour was formed it was impossible to say, whether the effusion of blood had occurred spontaneously, or whether it was the result of a blow, it could not be ascertained. He could not help remarking, how exactly the report of Dr. Monekton tallied with the facts which had occurred; and he was happy to give him the credit of being so accurate an observer. This gentleman had stated, that from what he had observed of the mass which had been removed, he had no doubt that the effusion had been intermittent. Now, he himself had noticed that the tumour had from time to time varied in size,

and no doubt it had been formed by slow and repeated effusions of blood. Mr. Fergusson, in concluding his remarks, stated that this case had been one of a most important nature, and that he hoped all those who had seen it would carry the recollection of it upon their minds. Such instances were exiremely rare: he had seldom seen one like it, and it proved how necessary it is to be cautious in giving a decided opinion as to the precise nature of a tumour.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening,	Feb.	28.—Medical Society of London. *Subject:*—Dr. J. Snow, "On the Cause and Prevention of Death from Chloroform." Eight o'Clock.
——	——	Royal Institution. *Subject:*—Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.
Monday,	March	1.—Epidemiological Society. *Subject:*—Dr. Gordon Latham, "On Epidemics of the First and Second Centuries." Half-past Eight o'Clock.
——	——	Chemical Society. Eight o'Clock.
——	——	Royal Medical and Chirurgical Society. *Anniversary.* Four o'Clock.
——	——	Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.
Tuesday,	March	2.—Pathological Society of London. Eight o'Clock.
——	——	Royal Institution. *Subject:*—Professor T. Wharton Jones, "On Animal Physiology." Three o'Clock.
Wednesday,	March	3.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock
Thursday,	March	4.—Harveian Society. Eight o'Clock.
——	——	Royal Institution. *Subject:*—Rev. J. Barlow, M.A., Sec. R.I., "On the Physical Principles of the Steam-Engine." Three o'Clock.
Friday,	March	5.—Western Medical and Surgical Society of London. Eight o'Clock.
——	——	Royal Institution. *Subject:*—Dr. G. A. Mantell, "On the Structure of the Iguanodon and other Saurians from the Wealden Formation of the South-East of England." Half-past Eight o'Clock.
Saturday,	March	6.—Medical Society of London. *Election of Officers* at Seven o'Clock. Reading of Dr. Forbes Winslow's Paper, "On Idiocy and its Treatment," at Eight o'Clock.
——	——	Royal Institution. *Subject:*—Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Medical Times & Gazette.

SATURDAY, FEBRUARY 28.

LOOK AT HOME.

Never yet has quackery in any of its many-headed shapes found favour with us. The more we see and consider its meretricious and degrading character, the more does our loathing increase, the stronger is our determination to oppose it. In these efforts we have enlisted on our side the cheering sympathies and aid of all enlightened and liberal practitioners. By means of that mighty lever, public opinion, we shall ere long see a pestilent evil rooted from among us; and the sooner the work is begun and carried out the better. Such, we know, must always, and under all circumstances, be an ungracious task; but, for ourselves, no man shall be able to say that we have, even for a moment, shewn any disposition to shrink from the performance of this our imperative duty.

We cannot but grieve, when we consider, that with the intelligence, the scientific spirit, and advancing character of our age, so many of our brethren, from whom we might reasonably have hoped for better things, have not only deviated from the straightforward and honourable path, but have turned greedily aside after practices spurned as disreputable by the great body of the profession, and justly considered as so many stations in the tortuous road to quackery.

As a prelude to the graver forms of this disease, let us enumerate some of the minor features of the deplorable evil,—such as may, for instance, be comprehended under the denomination of the DIRECT ADVERTISEMENTS; and among these are intruded most conspicuously those shining products of modern industry,—our monster door-plates. We do not recollect to have seen any plate of this kind that surpassed the broad-sheets of the Metropolitan press; but we have seen them large enough for the sign-post of Messrs. North, South, East, and West, cheesemongers and general dealers. Such ostentations and gleaming advertisements may be well suited to the adventurous and advertising tradesman; but to the professional man and the gentleman they are altogether and utterly discreditable. Never was the proverb more justly applied, "*Le style, c'est l'homme.*"

Another form of empirical advertisement is the blazing testimonial, or documentary lie, attached to the virtues of some proprietary nostrum or philosophic toy-like *modus medendi*, which effectually places before the eyes of thousands and tens of thousands the delightful and euphonious names of certain Doctors, as guarantees of its ineffable excellencies, sureties for its genuineness and purity, and vouchers for its unspeakable nothingness. Such names become familiar as household words, and more nauseous than the compounds they assure us are "tolerated in a satisfactory manner by the stomach." This species of empiricism is more disreputable than the former, inasmuch as the voucher and the vendor have a mutual interest in the diffusion of their handbills; since the Doctors find themselves thus introduced, together with the baker, the grocer, and the oilman, into numerous houses, where, but for this trick of trade, their names would remain as little known or heard of as a Frenchman's capers when cut beyond the vanishing point.

We must reform ourselves before we can hope to reform others; and therefore it would be well, from time to time, to expose some of the quackeries of the day with which the town is so rife,—as the man whose carriage barking dogs precede, yelping harmonious music, to announce their master's presence; or he who catches a patient by the announcement of a work that is never to appear; or adds to the advertisement of his book a laudatory passage from a lay newspaper; or whose door steps go unwashed, to make believe of "blessed feet" of patients; or who breaks his windows—and such things have been—to advertise himself, while he proclaims a reward for the detection of the offender.

We shall continue this subject, and we invite assistance.

GALLANT CONDUCT OF MEDICAL OFFICERS.

No medical man can read, without pride, Commodore Bruce's official account of the late capture of Lagos, the centre of the Slave-trade upon the coast of Africa. The testimony it affords of the gallantry and noble conduct of the members of our Profession engaged in that bloody and desperate fight, of their utter contempt of danger, and of the regardless manner in which they exposed their lives, is delightful in itself, and will be received with gratification by us all.

In this action—disastrous as it turned out with respect to the loss of life, though successful in its ultimate result—one of the steamers employed took the ground immediately be-

neath the convergent fire from the enemy's forts; it was accordingly thought fit to land and storm them. In this desperate undertaking, in which seventy brave fellows fell badly wounded, and fourteen were killed, (nine being shot through the brain,) the two assistant-surgeons of the Penelope, Messrs. Walling and Sproule, in the language of the Report, "landed at the charge with their comrades." Proud as we well might be of this courage, our estimate of it must be augmented when we remember that it was displayed, not in the heat of passion, nor in the hope of revenge, but simply in the performance of a duty which, under the desperate conditions of the case, was most probably self-imposed.

"Whenever," says the Report, "a man was struck in the boats, *a medical man was immediately by his side, setting their own lives at nought, when compared with the lives of their brave companions in arms.*" Cheerfully, we will answer for it, was this duty performed; and when the tenaculum was exchanged for the sword, manfully, side by side with the gallant blue-jackets, our Medical friends scaled the stockades. We do not wish to make ill-natured observations on such an occasion. But here, however, it might be, with the community of danger, and with the burden and heat of the day, the companionship of the assistant-surgeons with their brother officers ceased. In return for the danger they voluntarily courted, they were perhaps repaid by a denial of the comforts the law allowed them to demand. They might have seen, with bitter mortification, their brother officers, whom they succoured amid a shower of balls, "fighting their battles o'er again" beside the hearth at which they had no place, or they might have been allowed to hear them rejoicing through open doors, whose thresholds they dared not pass.

For all we know, such might have been the case. What security have we that Messrs. Walling and Sproule, of the Penelope, or Messrs. Morgan and Pendrith, of the Sampson, who also distinguished themselves by their devotion and courage, were not shamefully and illegally consigned, after their brilliant services, to the cold shade of the gun-room? The danger they devotedly encountered was certain, while their treatment as gentlemen depended entirely upon the caprice of a sea captain. Such a state of things Parliament certainly cannot tolerate; it cannot tolerate that men, whom it has especially interposed to protect, should any longer be subject to such humiliations. The Admiralty must no longer be allowed to stand between the full carrying out of the Acts of the Government; nor can the Crown, which has graciously conferred upon naval surgeons the military as well as civil Order of the Bath, see the aspirants to its most chivalric honours subjected to indignities intolerable to them as gentlemen, and degrading to them as officers.

POOR-LAW UNIONS.

Under the New Administration, we perceive that Sir John Frollope is appointed Chief Commissioner of the Poor-law Board; we shall, therefore, take an early opportunity of placing before this gentleman various points in which he may more efficiently fulfil his duties in benefiting the poor, relieving the rate-payers, and doing justice to the Medical Profession.

University of London.—The Senate of the University of London have determined that in future candidates for a degree in medicine shall have their practical skill tested at the bed-side. This is a great improvement. It will tend much to advance the study of clinical medicine. The candidates will have to make a *bonâ fide*, not a paper diagnosis.

REVIEWS.

A History of Magic, Witchcraft, and Animal Magnetism. By J. C. Colquhoun, Esq., Author of "Isis Revelata." Two Vols. London: Longman. 1851.

Those who look for amusement may read Mr. Colquhoun's volumes and find no fault; those who read for criticism cannot be quite so lenient. Mr. Colquhoun is no great admirer of medical science. Yet it would have been as well if, before he sneered at it, he had studied it, and then he would not have written a book which is a kind of hotch-potch of undeniable truths and incontestable falsehoods. If he had bestowed as much thought in the study of the curious phenomena of ecstasy or catalepsy, and the effect of mind upon body, as he has shown industry in the attempt to explain everything by animal magnetism, he might have writen less amusing volumes, but he would have given us a much more instructive treatise.

Mr. Colquhoun has been a disciple of Mesmer for more than half a century. In those barbarous times, when clairvoyance was yet laughed at, and mesmeric prophecy found no credence, the author of "Isis Revelata," with unwearied zeal asserted his belief. He now pours out the labour of his life in these two volumes.

Mr. Colquhoun has, in the course of an extensive reading, collected every fact which borders on the marvellous, and the supernatural. In every fact he demands one feature —singularity; and one tendency—towards the obscure. All recitals over which hang the darkness of ages and the ignorance of a superstitious time, have for Mr. Colquhoun a charm which he cannot resist. In antique traditions, in monkish legions, in pagan oracles, in Roman Catholic miracles, he detects nothing unworthy of belief, —nothing that can challenge scrutiny. Everything that can be denied, and everything which cannot be denied, is welcome to him, as long as it cannot be explained. If it cannot be explained it must have been owing to animal magnetism; therefore it was true—therefore it is to be received. All nations and all ages contribute to the history of animal magnetism. In the Jewish mythology, in the Hindoo Vedas, in the relics of Zoroaster, among the remains of classic writers, and Teutonic creeds, Mr. Colquhoun discovers mesmerism as the geologist digs up the fossils from the antediluvian strata. Animal magnetism was in reality the powerful influence which inspired the magic of the fire worshippers, which conferred healing power on the dwellers in the temples of the Egyptians and the Greeks, which dictated the Oracles of Delphi, the prophecies of the Jews, and the rhapsodies of Joan of Arc; which manifested itself moderately in the Jesuit miracles of Port Royal, powerfully in the Jansenist antics of the Convulsionnaires, and reached its culminating point in the immortal Mesmer.

Moses and Mesmer, Esculapius and Esdaile, Josephus and Joan of Arc, are among those who have been highly gifted with this potent fluid. Everything strange, everything incredible, which has happened in the world, was not in reality strange or incredible; it was merely animal magnetism. Even those miracles most dear to our reason and our faith are excepted in such a way by Mr. Colquhoun, that we doubt if in reality it is any exception at all.

The book begins at the wrong end. Procrustes made his bed, and cut its occupants to fit. Mr. Colquhoun takes his facts, and arranges them according to the mesmeric pattern. Clairvoyance, divination, and healing force leave few mysteries in the world except themselves.

To deal with such a man and such a book is impossible. It is like the "Arabian Nights,"—we do not question, we read, we are amused, we are lifted above the world into the region of talismans, and genii, and ethereal forms. If the sultan with the unpronouncable name had asked his sultaness with the unpronounceable name for the evidence which could prove that the Princess Scheherazade was turned into a white cat with blue eyes, we should not think him more absurd than the man who should sit down to dissect this history of magic. We would say to him who would read it, what the mesmerists say to their subjects, "Do not think; keep your mind vacant." A magical thing is not to be questioned, it is to be believed; it is like a fairy tale, a grain of unbelief makes the whole mass sour and unpalatable.

Mr. Colquhoun is not one of those rigid logical philosophers who seek to measure probabilities, as if magic were like mathematics. His faith is like his universal ether, bound-

less. No matter how distant, shadowy, and unreal may be the history he cites, his astonishing powers of belief embrace it heartily and put it in its place. To be uncommon is apparently the test of truth; and an occurrence which staggers the credulity of the world is a pretty certain indication that animal magnetism has been flying about.

Animal magnetism, according to the Colquhounian hypothesis, can account not only for the marvels of nature, but for the wonders of art.

"Into what heaven didst thou look," asked one of Guido, as he gazed on the Madonna, "when thou paintedst this angel?" The ignorant querist! The Madonna was a clairvoyant revelation. Raphael's clairvoyance made him paint; Mozart's caused him to compose; Colquhoun's causes him to write. All men of genius are magnetic; genius is mesmerism. More or less of this "divina aura" exists in all men, except that unhappy race of modern doctors, who though

"Learned in all the knowledge of a meagre, material, and narrow-minded system of philosophy, are utter infidels in regard to the influence of any spiritual powers over the modifications and manifestations of the human organism."—P. 88.

At the fall of man, says Mr. Colquhoun, "his inborn clairvoyance passed away from him."—P. 136. Since then he has done nothing but try and find it. Now, thanks to Mesmer and Colquhoun, the Millennium approaches. All men shall become as lucid as Okey, and as accurate as Mademoiselle Julie. Even we, though of that "infidel race" of "vulgar fanatics," who are bound in the chains of a "narrow-minded philosophy," even we feel, after this study of the history of mesmerism, something, it seemeth to us, like the approach of the mens divinior. We have been hurried so rapidly from Jew to Gentile, from Abraham to Ambrose, from Egyptian temples to modern hospitals, from Paracelsus to Puysegur, that our brain is in a whirl. Is this confusion of ideas, this chaos of images which we feel stealing over us, is this animal magnetism? Or, now as we turn over the last page of Mr. Colquhoun's book, what is this gentle weariness, this soft inclination to a grateful slumber, which impends over us? The magnetic trance is surely at hand! Adieu, worthy instructor; think not unkindly of us for our opinions of your clever book. Already we see, in clairvoyant fashion, all those who hunger and thirst after novelty,—and their name is legion,—cutting the leaves of thy pleasant and well-written volumes. Their praise will more than make up to thee for our scepticism; and popular applause will outweigh a thousand-fold professional unbelief.

Household Chemistry; or, Rudiments of the Science applied to Every-day Life. By Albert J. Bernays, F.C.S., Lecturer on Chemistry, and Conductor of the Chemical Laboratory, Derby. 12mo. Pp. 188. London: S. Low. 1852.

This little Volume is written for the use of young persons of general education, who have paid no special attention to the science of chemistry. It is divided into eight chapters. The first is on the Chemistry of the Breakfast-table; the second and third on the Chemistry of the Atmosphere; the fourth on Fermentation; the fifth on Dinner-table Chemistry; and the sixth, seventh, and eighth, respectively on Glass, China, and Earthenware, Soap, and the Household Metals. The chemical knowledge displayed is sound, the style lucid, and the matter interesting. Although the majority of medical men have entered more fully into chemical studies than the class this book is intended for, yet even they will find much here to refresh their memory; and whenever a patient knows anything on these subjects he expects his doctor to know more.

The Mirror of Dentistry; a Review of the Present State of the Dental Profession; with full information as to the various Operations in Dentistry, the Use and Abuse of Artificial Teeth, &c. &c. Illustrated by Engravings. By J. W. Davenport, Surgeon-Dentist, Hull. Pp. 81. London: Seeleys. 1852.

The "Mirror of Dentistry" not only reflects the practice of the author, but supplies us with his lithographic portrait. The book is a very good book for the purposes for which, probably, it was intended, viz., to lie upon the table in Mr. Davenport's waiting-room, and as a medium for making known his whereabouts. Mr. Davenport's improved forceps "Are so adapted, that on one side of the upper molar teeth, which have two spreading fangs, the bill of the instrument will slip between, underneath the crown and alveolar process, and on the opposite side will grip the neck of the tooth, thereby preventing the least possibility of slipping or cutting off, and will readily lay hold of the most difficult molars of the upper jaw."—P. 44.

To the young and inexperienced practitioner this may possibly be a desideratum.

GENERAL CORRESPONDENCE.

INOCULATION.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the *Medical Gazette* of the 19th December there is an article condemnatory of the re-introduction of inoculation in place of vaccination, advocated by Dr. Gregory and others.

That article has suggested to my mind a few queries which I would beg to put to those who advocate this practice.

1st. Do you not think that by the universal practice of inoculation you keep up in every house, in every family, throughout the length and breadth of the land, the contagion of the very disease you want to get rid of?

2nd. Do you not think that the contagion thus everywhere present is much more likely to cause a greater number of cases of independent small-pox, and prove more often fatal than where the contagion is kept up by solitary and isolated cases?

3rd. Even allowing the greater efficacy of inoculation, which, however, comparatively few will yet admit, do you not think that universal vaccination, if such can be obtained, would be much more likely wholly to banish the scourge of small-pox, considering that it diminishes at least very greatly the chances of an attack, while it, at the same time, diminishes the amount of the poison or contagion in any given district; while inoculation must ever increase this amount?

4th. And in corroboration of this, is it not notorious that in some districts where the practice of vaccination is all but universal, the small-pox is scarcely ever seen? which proves one of two things: either that vaccination is in itself most effectual in each individual case, or, having a very considerable effect, which I presume all admit, it so diminishes the total amount of contagion that the general effect is its almost entire banishment.

If this be true (I can cite one instance, where for many years I never heard of a single case,) what may not be expected from a universal system of vaccination.—I am, &c. A Reader.

[Perhaps Dr. Gregory will reply to the above queries.—Ed. *Medical Times and Gazette.*]

UTERINE ULCERATION.

I.

[To the Editor of the Medical Times and Gazette.]

Sir,—The recent proceedings of the Medical and Chirurgical Society, with your comments thereon, in your Journal for February the 7th, must have great interest with every medical man, whose attention is frequently directed to the diagnosis and treatment of ailments peculiar to the female. Looking upon uterine disorders as perhaps the most fertile sources of derangements in the female economy, it appears to me most highly desirable that our most eminent pathologists should take some steps to bring this *vexata quæstio* of the frequency or infrequency of uterine ulceration to a more satisfactory conclusion than the mere affirmation of one party and counter-affirmation of another. Why should not the subject be fairly and amicably investigated by a committee of some six gentlemen (three on each side of the question) at some one of the institutions for the diseases of women, and a report drawn up by them be laid before some future meeting of the Medical and Chirurgical Society? In the meanwhile, are our pathologists quite correct in assuming *post-mortem* appearances always faithful to the ante-mortem condition of structures having highly vascular organisation, and more or less of erectile tissue therein? Suppose no collapse to take place upon decease, no flaccidity or alteration in colour to supervene during the last few moments of life, may not the very traction and manipulation necessary in removal of the uterus with cervix, os, and portion of the vagina, render the discovery of inequalities and slight abrasions upon the mucous surfaces more difficult? I allude not, as a matter of course, to deep fissures and excavations which the finger can easily discover. Are the microscopic observations by reflected light upon a mucous surface, which has, perhaps, been roughly separated by the scalpel from the os or cervix of the

uterus, to be depended upon? when even the slightest film of mucous here or there may give rise to appearances which the free use of the sponge may remove; and, if the sponge be used, what guarantee that no lesion of the surface has been thereby produced?

Our forefathers in medicine deemed vivisection observations only to be relied upon, and that little or nothing could be learned by examination of bodies after the departure of the vital principle. Are not pathologists of the present day somewhat in the other extreme, in not making proper or adequate allowances for *post-mortem* alterations of colour, form, consistence, etc., arguing that such and such must have been the appearance during life, because it is found so by ocular evidence after death. To my mind, the ocular evidence from the living subject, borne by men eminent in our Profession, carries more weight than the *post-mortem* conclusions deduced by the justly distinguished Dr. Handfield Jones and Mr. George Pollock and others. If these gentlemen's statistical theories are approximately true, I cannot understand why uterine and vaginal catarrh should so frequently exist for years, and not more frequently produce appearances analogous to what we know do take place in other surfaces covered by mucous membranes,—larynx, fauces, schneiderian membrane, conjunctiva, etc., etc.; nor can I account for the pain so frequently experienced by leucorrhœal women during coitus, or the small sanguineous show that occasionally then ensues. If no specks or points of denuded or abraded surface, what is the cause of the capricious show at periods in gravid women who have habitually suffered from leucorrhœa? Also, why do we find the gradual transition from the natural slight mucous lubrication of the female organs of generation to increased mucous secretion, then to muco-purulent, and then, as the affection becomes inveterate, to puriform matter, except in these latter stages there be, if not actual ulceration, something very similar to it?

And, lastly, except healing by resolution, or by the influence of remedial agents, what but that of ulceration is the subsequent condition of the mucous membrane of the uterus, which may frequently be seen coated with a diphtheritic membrane of lymph?

I certainly look upon the speculum as a useful auxiliary in the diagnosis and treatment of many uterine disorders,—that, without it, some inveterate cases admitting of cure would go unrelieved; but I find that the majority—perhaps as ten to one—of these cases can be cured by vegetable and mineral astringents with general treatment, without the aid of the "abhorred" instrument.

I sincerely hope the question will be further investigated by the eminent gentlemen who have enlisted themselves on opposite sides, and that the Profession will be favoured with the results of their inquiries; and that, for the future, there will be less display of the acrimonious warmth which the subject has hitherto generally called forth.

I would add, if the use of the speculum is so loudly condemned, as immodest, indelicate, etc. etc., digital examination ought to come in for an equal share of the opprobrium.

I am, &c. JOHN H. WEBSTER, M.D. Cantab.

Cambridge.

II.

[To the Editor of the Medical Times and Gazette.]

SIR,—If you consider the following case of any value during the present fierce battle of the os uteri, you are at liberty to make of it what use you like:—

Jan. 29, 1852.—Called in the evening to see A. C., aged 28, in easy circumstances; single. Upon inquiry into her previous history, I learned that she had never enjoyed good health since she was 16 years of age, the uterine functions being greatly out of order all that time,—in fact, she never had been properly "regular," she said. Has had much medical treatment up to two years ago, since which time, until the present, she has done nothing but take a little quack medicine. For several years, the exact time not certain, a very large quantity of "pure water," as she calls it, has been daily passed per vaginam; one of her attendants says, often quite a gallon per diem; but I would say, at least a pint a day, taking one with another,—the effect of which was to cause utter prostration of mind and body, to counteract which she has taken very large quantities of support. Has seen a good deal of domestic trouble.

Present State.—Conformation generally very stout, but well-proportioned; lying in bed; answers questions rationally, still describes most extraordinary sensations and fancied symptoms,—among others, that she believes that, two years since, the medicine she then took had caused her to conceive,—and has many other equally absurd fancies; in fact, she was evidently labouring under mental disease, as well as bodily.

Her chief source of complaint, however, is the lower part of the bowels, back, and thighs, together with her head.

Having explained to her my wish to examine the state of the uterus, I found, on passing the finger, that the hymen was entire, and that the os was very large and excessively tender, the posterior lip feeling slightly uneven and rugose. Feeling now satisfied that there was some disease of the os, which probably gave rise to the distressing symptoms, I advised her to consent to the local application of the nitrate of silver, which she readily did, being most anxious to regain her health.

Jan. 30–31.—The mental disorder was evidently increasing in intensity, and on the following day, Feb. 1, the nitrate of silver was freely applied, for the first time, to the part where, with the speculum, was seen what in any other part of the body would be called an ulcer, as well as to the whole os uteri.

Feb. 5.—Much better in every respect, having taken one grain of the sulphate of quinine and five minims of the tincture of the sesquichloride of iron thrice a day. The state of the mental faculties varied, some days she being perfectly rational, at others labouring under illusions and hallucinations.

Feb. 10—12.—During these two days the menstrual discharge has been most abundant, more so than at any time during the last twelve years, and more than is usually discharged at the catamenial period; but at present there is no improvement of the mental derangement.

Feb. 13.—Catamenia less abundant.

Feb. 14.—Removed to-day to a private asylum, she having no friends, and living in a house by herself, and so unable to obtain the necessary care and attention.

The case is not reported for any other purpose than to direct attention to the state of the os uteri; and therefore, for brevity's sake, I have omitted many of its details, although the whole case is replete with the greatest interest.

I may mention, before concluding, that, when previously under treatment, the great object was to induce a healthy performance of the uterine functions, and, therefore, all the credit can scarcely be given to the mixture this time prescribed; for, if medicine alone would so quickly produce such effects, it is not likely that the means previously employed by able and judicious practitioners would have failed.—I am, &c.

RICHARD NEALE, M.B., M.R.C.S.E.

Late Physician's Assistant, University College Hospital.

Fazeley, Staffordshire.

ON THE FINAL CAUSE OF MENSTRUATION.—DR. RAMSBOTHAM'S REPLY.

I.

[To the Editor of the Medical Times and Gazette.]

SIR,—The subject of the final cause of menstruation is acknowledged on all hands to be one of so much interest, as well as obscurity, that I trust you will again permit me to intrude a few remarks upon your pages, called forth by the second letter of "M.D.," published in the last number but one of your Journal.

Your Correspondent expresses himself as disappointed,—though, he confesses, perhaps unreasonably so,—at my answer to his questions; for he thought it likely I would bring forward some interesting facts to support the hypothesis I hold. That there may be no mistake, I shall take the liberty of repeating in what that hypothesis consists. It is, that at, or a little prior to, the time when what is called the menstrual discharge is formed, in every instance an ovule parts from the ovarium, and passes into the Fallopian tube; or, to put it in another way, that the excitement which is set up in the generative system, consequent on the escape of an ovule from the ovarium, occasions the uterus to make preparations for its reception, defence, and nutrition, in the expectation of its becoming impregnated; that with this view that organ furnishes a secretion; that if impregnation occur, that secretion is retained, and becomes the deciduous membrane; but that if the ovule is not fructified, the arrangements made by the uterus not being required, the fluid is permitted to escape as a valueless excretion. If this supposition be correct, the fluid may be regarded as afforded in anticipation of the woman conceiving, under which circumstance only is it turned to any useful account. The hypothesis would also include the admission, that the ovule may be fecundated either just as it is leaving the ovarium, or at any part of the tube in its transit towards the uterus; that it is not necessary that the bursting of the Graafian vesicle, and the commencement of the menstruous flow should be simultaneous; but that it is quite possible the ovule may leave the ovarium some days before the uterus begins to prepare the nest for its reception. Should, however, the two actions—the escape of the ovule and the commencement of the flow—be contemporaneous, that fluid which notified its departure, being evacuated, can of course be of no advantage to it; nevertheless, if

it be fecundated, while in the tube and still possessed of its semi-vitality, the uterus will provide for its preservation by a fresh secretion of the same character, which will be retained and converted into a deciduous membrane, even before the periodical return of the time at which the menses should next appear; that as far as the maturation and escape of successive ovules from the ovarium, and the consequent flow of the menses, being periodical is concerned, that fact is in accordance with a general law of nature, which prescribes a periodicity in the recurrence of most functions in the economy of both the animal and vegetable kingdoms; and, lastly, that the expenditure by Nature of so much fruitless effort, in the elaboration of so many successive ovules which are lost, is by no means without a parallel, as we see in the seeds of plants, in the ova of fishes and reptiles, and as we observe also in the male sex of animals, where an immense number of spermatozoa are constantly being brought to perfection, and (except in the single instance of the one destined to assist in the work of fructification) are as constantly perishing.

That any facts could be adduced in proof of a hypothesis of this nature, on a subject so deeply hidden, is almost more than could be looked for, and we must be content with probabilities to support it; those probabilities partly resting on the presumption, that the menses and the decidnous membrane are both furnished by the same peculiar glands, since sometimes a membrane is formed in the virgin uterus, either instead of, or in addition to, the menstrual fluid; that no woman is susceptible of impregnation, in whom there is an entire absence of the discharge, (by which I must be understood to mean, not only a temporary suspension, but a total want of disposition on the part of the uterus to furnish it, that absence being merely a consequence, and at the same time an indication, of there being no ovule in a condition fit for impregnation, and not in itself a cause of the existing barrenness;) that the susceptibility for impregnation diminishes in proportion as these actions deviate from the natural and healthy standard; and that woman alone is subject to the flow, because she is the only animal in which a deciduous membrane is secreted.

"M.D." objects to the following position of mine, that if conception occur soon after menstruation, the ovule being in the tube, there is no reason why the uterus should not furnish a deciduous membrane, before the time when the menses ought next to appear, by the remark, that if the uterus "has the power of superseding that discharge in its functions, why should woman be afflicted with such a periodical nuisance?" But "M.D." should bear in mind, that it is really the institutes of man which doom the woman, in most instances, to this "periodical nuisance." Nature has determined that the female of the human species shall be capable of procreation at a certain age. At that epoch she begins to elaborate ovules in the Graafian vesicles, and to discharge them periodically into the Fallopian tubes. She doubtless intended that the first ovule perfected should become impregnated, else why should she form it. If so, either the first flow of the menses would be superseded by pregnancy, or, if the discharge appeared once it would not occur again until after the period of suckling was passed. As soon as the woman ceased suckling, she might again become pregnant, even before the next ovule ripe for conception left the ovarium; thus the discharge would be a second time superseded, and so on for a continuance. Indeed, we meet in practice with women who pass over many years of their married life without any appearance of the menses, in consequence of their suspension during pregnancy and suckling, there existing in the system of such females so great an aptitude for conception, that, as soon as the time has arrived for a fresh ovole to be eliminated, it is fecundated immediately after its escape from the ovarium; and the fluid which was secreted, as a consequence of its departure, and which would have flowed away externally had impregnation not been effected, is preserved for the object already sufficiently pointed out.

But the usages of man, based on moral and religious grounds, aided by her own innate sense of propriety, as well as by example and education, preclude the young female from the gratification of the natural inclinations; and the artificial state of society appertaining to all civilised communities, renders marriage impracticable, or at least inexpedient, except in rare instances, until some years have elapsed beyond the period when the age of puberty has been reached.

On the principle above stated, "M.D.'s" case of pregnancy, where there had been an absence of the menses for eleven monthly periods, may be explained. From some morbid cause, local or general, no ovule had been perfected during the interval; consequently, as none parted from the ovarium, no menstrual fluid would be formed. Impregnation, however, took place as soon as the healthy state of the organs had brought one to perfection just as it was making its escape by the rupture of the Graafian vesicle; and the fluid, instead of being evacuated, was used for conversion into the deciduous membrane.

"M.D." thinks it a pity I can give no support to my suggestion, except Dr. Letheby's solitary case; in answer to which I must remark, that Dr. Letheby has noted two cases nearly similar; and that it is only since the unimpregnated ovule was detected by Baer(a) floating in the fluid of the Graafian vesicle that physiologists have sought for it in the Fallopian tubes, either of the lower animals or the human subject. We must regard these researches, therefore, as still quite in their infancy.

He also says, my suggestion must stand over until, by some lucky circumstance, it is decided where impregnation does take place, and whether by the seminal fluid itself or the fabulous *aura seminalis*. The latter question has been, as it appears to me, put completely at rest by the numerous and carefully-conducted experiments of Mr. Newport, as detailed in the "Philosophical Transactions," to which paper I referred in your Number for Feb. 7. He shows distinctly, that not only has the *aura seminalis* no influence in producing conception, but that the great mass of the *liquor seminis* is equally inert; and that it is by the contact of one or more *spermatozoa* with the ovule alone that the wonderful effect is produced. The former question I will allow to be considered as still *sub judice*, if "M.D." insists upon it, notwithstanding the strong support I obtain from the opinion of Mr. Newport, that the ovule may be impregnated at any time during its transit though the Fallopian tube.

I am, &c. FRANCIS H. RAMSBOTHAM.

14, New Broad-street, and 7, Portman-square.

P.S. Since the above was written, I have seen my friend Mr. Kesteven's letter.

I quite agree with that gentleman, that it is both desirable and necessary for experiments to be made and repeated, and for the researches of different trustworthy observers to be collected and compared, before the views I have adopted are received as established principles in physiology; but when we take into consideration the many times that the unimpregnated ovule has been found in the Fallopian tubes of the lower mammalia, in conjunction with the discoveries made by Dr. Letheby in the human female, I do not think that I am assuming a hypothesis without a warrant, or am unreasonable in the conclusions that I have drawn. I sincerely hope, as this is a subject of first-rate interest, and as a wide field lies open for exploration as well as for conjecture, that some of the intelligence and energy of our Profession may be brought to bear upon it; and I feel convinced in my own mind, that the further it is prosecuted the more distinctly will the sentiments above advanced be confirmed.

Mr. Kesteven asks to be informed, whether Dr. Letheby submitted the objects discovered by him (which were presumed to be ovules) to myself or to any other person. I did not see the recent preparations, but I saw the drawings that were made from them at the time, and I know the preparations themselves were submitted to the observation of at least one practised microscopist, who had no doubt of the nature of the minute body detected. I have Dr. Letheby's authority also for saying, that his paper, which was read before the Royal Society, is now in the printer's hands, and will shortly be published among the transactions of that body. The very fact of its having passed through the ordeal of the Physiological Committee of the Royal Society is a proof that the members of that Committee were satisfied with Dr. Letheby's facts, as well as a tolerable guarantee for the correctness of his opinions.

II.

[To the Editor of the Medical Times and Gazette.]

SIR,—May I ask the favour of space for the following remarks in reply to the last communication of Dr. Ramsbotham.

I am, &c. H. C. ROODS, M.D., M.R.C.S.

32, Bloomsbury-street.

I am quite ready to concede, that Mr. Newport is, as an observer, all that Dr. Ramsbotham describes him to be, and that his opinions are deserving of the greatest respect; I cannot, however, admit that the point in question can be decided by observations made upon reptiles. Doubtless, the study of comparative anatomy and physiology is calculated to throw much light upon questions of human physiology, and, the nearer the animals upon which observation is made approach in their organisation to that of man, the more valuable the facts observed become; and therefore, if Mr. Newport's impression, that the ovum is susceptible of impregnation during any part of its transit through the Fallopian tube, be founded on facts observed in the mammalia, the point in dispute may possibly soon be satisfactorily decided.

With regard to the question of "A London Surgeon," repeated by Dr. Ramsbotham, "How it happens, if nature requires a safety-

(a) De Mammalium et Hominis Genesi.

valve against a coming exigency in one animal, why not in another?" the Doctor says, in his former paper, the lower animals do not menstruate. It may be so: nevertheless, in many quadrupeds, at the period of heat, which I take to be that of evolution of the ovum, a turgid condition of the vessels of the sexual organs obtains. A medical friend, with whom I conversed on this subject, states, that on applying a piece of white paper to the vulva of a bitch, when in this state, he has found it stained with a reddish fluid. Another party, present at the time, mentioned that he had a pet spaniel, and had observed that a piece of flannel, which formed her bed, was marked at those periods; and, moreover, that the permission she had generally to come into his bed-room and jump on the bed in the morning was not accorded when she was at heat for the reason that she left spots on the bed-clothes. I have myself observed sometimes a preternaturally moist state of the vulva in the cow and some other animals. This may or may not be analogous to the menstrual discharge in women, and subserve the same purpose, viz., that of relieving the turgid vessels. Whether the exertion be regarded as a safety-valve or not, it is clear women do not suffer from the loss, but rather feel the better for it, unless it prove excessive in quantity, when it partakes of the character of disease. The provision for preparing the uterus for the reception and retention of the ovum in quadrupeds and woman need not necessarily be identical; in the former no deciduous membrane is requisite for insuring its retention, while the erect position of the latter renders it essential, and a higher degree of preparatory vascular activity may be necessary for insuring its formation, when required, than would be demanded for simply causing the adhesion of the ovum to the uterus. A difference of organisation may also readily be conceived requisite for a being in whom the evolution of the ova occurs monthly, and others where it happens but once or twice in the year, and then at a particular season, only.

I entertain, then, the opinion, which I believe is the general one, that the ovum may be impregnated up to the period of the appearance of the menstrual discharge; and, as nature does nothing abruptly, the change would take place in the turgid vessels of the uterus only after she became conscious (a term used by Hunter, and, if not philosophical, expressive of the meaning to be conveyed) of having failed in accomplishing her ultimate purpose; therefore the ovum, possibly and probably, may not suddenly lose its vitality and susceptibility of vivification immediately on its reparation from the ovarium.

Pregnancy, under the circumstances mentioned by "M.D.," would be impossible, if the views propounded by Dr. Ramsbotham be correct; whereas, if the menstrual discharge is, as I suppose, only an effect of a preceding turgid condition of the vessels of the uterus, as explained in my former letter, there would be little difficulty in conceiving that, under certain circumstances, the erethism of the vascular system of the organ might be carried to a point sufficient for the formation of a deciduous membrane, and yet generally fall short of that usually attained before the vessels give out their contents.

III.

[To the Editor of the Medical Times and Gazette.]

Sir,—That the views concerning the final cause of menstruation, recently put forth by Dr. Ramsbotham, should have attracted unusual notice, is not to be wondered at, whether we consider the character of the advocate, or the intrinsic interest that attaches to the subject of inquiry itself. There are no parts of the body which afford a clearer proof "how fearfully and wonderfully we are made" than the organs which are concerned in the reproduction of our species. Although careful investigation has done something to ascertain the complex phenomena which occur in this mysterious process, we are still but little acquainted with its intimate nature, with the circumstances under which it proceeds, or with the means by which it is effected or carried on. All that we know is, that the uterine organs at a particular period of life acquire a suddenly-increased activity; that they are then subject to a periodical erethism or turgescence; that at these times the uterus pours forth a sanguineous discharge; that an ovule is disengaged from its ovarian bed, and that between the intervals of the appearance of menstruation the ovum is capable of becoming impregnated.

The chief points which Dr. Ramsbotham has endeavoured to elucidate are, the relation of the menstrual flux to impregnation, the period at which the ovum is separated from the ovary, and the position in which the ovule may be impregnated. Although the following remarks may have the appearance of opposition to Dr. Ramsbotham's views, they are really intended more for the purpose of eliciting information, and of procuring some explanation of the points which appear to the writer still somewhat obscure.

Dr. Ramsbotham is disposed to coincide in the view which regards the menstrual secretion as the rudiments of the deciduous membrane. There is one consideration, however, which appears to militate against this opinion; and it is this—that if it be the case, as is commonly supposed, that conception most frequently occurs shortly after a menstrual period, the fluid which is secreted for the purpose of forming the decidua very rarely, in fact, performs that office, inasmuch as the impregnated ovum, passing into the uterus before the recurrence of the next period, at once requires the uterine membrane for its investment and nutrition, which membrane is then furnished, as Dr. Ramsbotham admits, by a fresh and irregular act of the uterus. If, then, it is evident that the uterus can at any time, and very frequently does, independent of the menstrual period, form a deciduous membrane, under the stimulus of the impregnated ovum, why should the menstrual secretion be produced for that purpose at all, more particularly if it so often, if not generally, fails to perform the part assigned to it in the great work of conception? If the purpose of the catamenia were really to form the decidua, it would appear, *à priori*, that the ovule ought to be detached and impregnation be restricted to a period antecedent to their periodical return, instead of the secretion (which is intended to serve an after purpose to impregnation) being cast off just at the moment when it is most likely to be needed. Moreover, it is well known—and doubtless Dr. Ramsbotham's large experience has furnished him with cases of the kind—that impregnation may take place without the previous occurrence of menstruation at all, and that here the uterus finds no difficulty in supplying the necessary secretion for the purposes of the ovum. In these cases the ovarian portion of the menstrual function must of course be duly performed though the part which appertains to the uterus, and which constitutes the overt act of menstruation, is altogether wanting. The two circumstances, then, which seem to oppose Dr. Ramsbotham's idea of the uses of menstruation, are, first, that the uterus more frequently than otherwise forms the deciduous membrane altogether independent of the menstrual function; and, secondly, that the menstrual secretion, is produced immediately before the period when conception most generally takes place.

With regard to the period at which the ovule parts from the ovary, Dr. Ramsbotham states, that "it may be that the commencement of the formation of the menstruous fluid is not contemporaneous with the separation of the ovule from its ovarian nest, but that the ovule parts from its previous connexions some days before the fluid is secreted;" and this view is certainly supported by the fact of conception not unfrequently occurring immediately before the expected re-appearance of the catamenia, when it can scarcely be attributed to the impregnation of the ovum separated at the preceding period. Were Dr. Ramsbotham's view of the purposes of menstruation correct, one would expect that this would be the most usual period of conception, and not that it should occur some time after the escape of the fluid which is destined to subserve the very act which it precedes.

Dr. Ramsbotham believes, that fecundation of the ovum may be effected at any part of its transit through the Fallopian tube, or even occasionally at the ovary itself. That it is not limited to the period of the connexion of the ovum with the ovary, as some suppose, appears probable, independently of the experiments of Bischoff and others, which go to prove the contrary, from the fact, that conception may take place so long after the disappearance of the menstrual discharge, when it may fairly be presumed that the ovum has long been extruded from the Graafian vesicle. The occurrence of impregnation, on the other hand, immediately prior to a menstrual period, would justify the inference, either that fecundation takes place while the ovum is still in connexion with the ovary, or that, being expelled before that fluid is produced, it is fecundated at the very commencement of the Fallopian tube. There is one point to which Dr. Ramsbotham has not alluded, from perhaps not appearing concerned in the immediate objects of this inquiry, but which certainly deserves some better explanation than it has yet received, inasmuch as it points to a peculiar effect produced at the ovary whenever, and only when, impregnation takes place, and that is, the formation of a true corpus luteum. It has certainly been stated, that more or less perfect corpora lutea are formed at every act of menstruation, attended with the expulsion of an ovum, and that their degree of subsequent development depends upon the extent of vascular excitement in the generative organs attending the process of menstruation. But this scarcely affords any satisfactory explanation of the large size and peculiar characters which these bodies present as the result of conception, because, although we may presume that the ovum which is fecundated is highly and perfectly developed, and that its extrusion from the ovary has been attended with the maximum degree of vascular excitement, we cannot so readily explain the peculiar changes in the Graafian vesicle to which conception alone gives rise; and the less so if we believe that the ovum may be impregnated when far away from its ovarian bed, and when the sudden influence produced upon it by

fecundation can, one would think, have little effect upon the changes that occur in the healing of the ruptured Graafian vesicle.

Dr. Ramsbotham's mode of explaining the occurrence of menstruation with an impervious state of the Fallopian tubes is readily conceivable. The ovaries may still perform their function, and still excite the uterus to pour out its normal secretion, although the ova are unable to traverse the tubes that would conduct them to the interior of that organ. Sterility would in this way be readily explained. It is easy to conceive, that the menstrual discharge may be absent, though the ovaries remain in a state of integrity; but it would be difficult to believe, that that secretion should be present where the function of the ovaries was destroyed.

London. I am, &c. E. W.

THE TREATMENT OF SCALP WOUNDS.

I.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the *Medical Times and Gazette* of the 7th February, there is a paper from Dr Thomson, of Radcliffe, on the treatment of scalp wounds, wherein the plan of applying a compress and bandage instead of plasters is advocated. Dr. Thomson says, "I can bring no other case in defence of this treatment;" therefore I beg to add my testimony to the efficacy of this mode of practice; and also to state, that I have treated numbers of cases in such a manner, and with almost uniform success. I consider plastering may be quite dispensed with in the treatment of many scalp wounds, and that its place may with propriety be taken by lint and bandaging, chiefly for the following reasons:—

1st. The application of a piece of lint followed by a bandage is the best means of staying hæmorrhage from the scalp.

2ndly. The application of lint does not require the head to be shaved, which must necessarily be the case if plasters are used.

3rdly. A more equable pressure can be made, and union, therefore, expedited.

4thly. Because it is not desirable to take away the hair, particularly from a female.

5thly. The necessary dressings may be applied in a quarter the time.

Thomas Andrews, aged 30, was admitted into the Queen's Hospital, some nine months back, under Mr. Sands Cox, with a wound of the scalp extending from the occipital protuberance in the direction of the temporal ridge almost to the external angular process of the frontal bone—the wound, therefore being upwards of five inches in length. The scalp was detached, and formed a large flap, which hung over the temporal region, and rendered the wound very formidable in appearance. There was also somewhat profuse hæmorrhage from branches of the temporal and frontal arteries. The hair was taken away for the extent of half an inch on each side of the wound, and then compresses of lint applied laterally, secured by a bandage, the parts being thereby brought into perfect apposition. The lint and bandage became soaked with blood, which, however, soon became dry, and resisted any further hæmorrhage. Purgatives were administered, and quietude enjoined, as a matter of course; but the dressing was not taken away for six days, when, on its removal, the wound was found perfectly healed, and the patient was discharged in a day or two afterwards.

Instances such as this related might be multiplied to a great extent; but I have selected the case of Andrews as, being a very bad one of the kind, it shows with greater force the efficacy and simplicity of the treatment.

It frequently also happens that small wounds prove very troublesome by hæmorrhage, and then a pledget of lint and a bandage will be found the most available means for adoption, even although the open mouth of a vessel may seem to invite the application of a ligature. By the former means, we avoid the risk of erysipelatous action, which a ligature appears sometimes to induce.

This treatment, however, must not be indiscriminately adopted; the following must form exceptions, as it would not in such cases be proper to close scalp wounds under the expectation of immediate union:—

1st. When the periosteum is scratched off and the bone roughened; such cases being frequently followed by exfoliation of a superficial layer.

2ndly. Where there is laceration of the tendon of the occipito-frontalis; such cases being mostly followed by sloughing of that texture.

3rdly. Where there is much grit or dirt forced beneath the scalp, it being sometimes impossible to remove every impurity, and therefore suppuration inevitably becoming established.

With these exceptions, a piece of lint and a bandage will be found the most serviceable applications, even though the wound be of very great extent. I am, &c.

W. J. Moore,
Resident Surgeon to the Queen's Hospital,
Birmingham.

II.

[To the Editor of the Medical Times and Gazette.]

Sir,—In reference to a communication from Dr. Samuel Thomson, on the Treatment of Scalp Wounds, in your Number for Feb. 7, allow me to suggest generally the use of the condemned suture. I was led to the cautious use of the suture on account of the inconvenience to the patient of the loss of so much hair as is necessary for the satisfactory application of plaster, and the difficulty of its adhesion while blood is flowing. I have long followed this method, and have never found it injurious,—most of such cases healing in a few days.

The treatment by suture has the advantage of allowing the part to be uncovered, which prevents bleeding; or, if found advantageous, the application of water, either as a fomentation or an evaporating lotion.

I find a "glover's" needle far more useful than such as are commonly sold as "surgical." The thread is removed on the third day.

I am at a loss to understand how the few additional minute wounds, and the slight traction required, can lead to any serious result, but have always avoided heating the wound with coverings, and kept it as clear of the discharges as possible. I am, &c.,

Maryport. Fred. Curtis.

III.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have read with some interest Dr. Samuel Thomson's cases of incised wounds of the scalp, as published in your paper of Feb. 7. I cannot but conceive the writer to be a novice in the Profession, or he would long ago have known, that the Profession, in all ages, from the days of Galen down to the lecturers on Anatomy and Surgery of the present day, have again and again borne witness how rapidly wounds of the scalp have been and are known to unite, arising no doubt from the great vascularity of the scalp. The same writer also observes, there is great danger to be apprehended from wounds of the scalp. To be sure there is, but not from primary, but consecutive causes, as erysipelas, which is so well known to attack injuries of the scalp, and from its contiguity to the brain, may prove fatal; but the injury itself, taken as a whole, is not, in my opinion, of a dangerous character.

He would have us bandage, and thus keep the head warm; if such is the practise in Lancashire, it is not so here. If the hæmorrhage be great, then I admit compression by means of compress and bandage may be useful; but this only for a few hours, until the hæmorrhage is arrested, which, being done, remove all bandages and appliances, except those of the most simple and light description. Take an instance which happened in my own practice a week since. H. B. keeps an oil and colour-shop, and had been invited to meet a few friends at a matrimonial revelry. In consequence of an altercation, H. B. was knocked down by one of the party, and his head, or rather forehead, coming in contact with the edge of a sharp iron fender, inflicted a frightful incision. Besides dividing the temporal artery, the cranium was laid bare, and the wound itself was about six inches long. The loss of blood, which was very great previous to my arrival, from the fluor being so coated with it, was estimated at five pints; but I think three, perhaps, would be nearer the mark: however, the loss was great. In this case I used a compress and bandage for twenty-four hours, with marked benefit, to arrest the hæmorrhage, which, being done, was immediately discarded for a lighter and better appliance—namely, Liston's isinglass plaster—which in four days had completely united the wound, and the man was here on the seventh day, as well as ever. There is another great advantage in this plaster, that it admits of an examination of the wound without disturbing the dressing. I agree with Dr. Thomson in one particular, that in wounds of the scalp, it is well to let the dressings remain for some days,—at this period of the year for four, five, or even six days, without their being disturbed, unless any symptoms should contra-indicate it otherwise. Of all wounds to treat, generally speaking, none are more tractable than incised wounds of the scalp, and the rapidity with which the progress of union is carried on is truly astonishing. In twenty-four hours I have seen a most formidable gash nearly healed, by the simple application of bringing the edges together by means of Liston's plaster, of which I cannot speak too highly.

80, Minories. I am, &c. F. Rawle, L.A.C.

INJURIES OF THE HEAD.

[To the Editor of the Medical Times and Gazette.]

SIR,—In reference to Mr. Warwick's case of injury of the head, in the *Medical Times and Gazette* for Feb. 7, I may just relate the following fact. About six or eight weeks since I was (in the absence of a medical friend) requested to visit two men who had just been hurt in one of the pits here.

One had received a dislocation of the hip; the other a compound fracture of the right tibia, and a compound fracture of the right frontal bone. The roof of the orbit was entirely driven in, the brain lacerated, and cerebral matter found in the wound, which was ragged and lacerated. The man was a little drowsy, but there were not any symptoms of pressure. I drew the edges of the wound together with a roller. In the evening my friend and I visited him together, and, as there were not any symptoms of pressure, we determined to wait. On the following morning, we again saw him together, and, as the symptoms did not call for it, no interference took place. The progress towards recovery (I learn from my friend) has been uninterrupted; signs of compression, and indeed of cerebral disturbance (and even a little delirium,) never having appeared. This is only one of many cases I have witnessed of fracture with depression of the bones of the skull, with or without laceration of the brain, in which cerebral symptoms have not supervened, and in which patients have recovered when they have not been too much meddled with, of some of which I retain notes.

I am, &c. J. H. HOUGHTON,

Dudley. Surgeon to the Dispensary.

P.S. Let me take this opportunity of expressing my unqualified approbation of the principles laid down for the guidance of the *Medical Times and Gazette*, in the short editorial article of February 7th.

PROLONGED GESTATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have been much gratified to find that some of your readers have favoured the Profession with their views on my "Remarkable Case of Gestation," published in the *Medical Times and Gazette* on the 31st of January, 1852.

I feel it incumbent to notice the communications of your correspondents on the subject.

Dr. Ridge (in letter 1), who appears to have devoted his attention very closely to the study and observation of midwifery, states: "I have had many of these cases, both single and double, yet not one resembling Dr. Foley's," etc. He then calculates dates to explain his views on it, which are ingenious enough but not correct.

I have stated, that "the patient described herself as having reached the third month of pregnancy,"—that is, the completion of it, not the beginning, nor the middle, but the end of that period. The calculation of 252 days, or nine lunar months, is accordingly incorrect, therefore I may pass over that portion of his letter.

There is no doubt that the substance discharged after the hæmorrhage was an imperfectly impregnated ovum, which I, casually using an ordinary term, designated a "mole," that it might be understood as a solid, fleshy body, containing no rudiments whatever of a fœtus to distinguish it from a similar substance containing such rudiments, and more properly a "blighted" ovum. If I had had any idea of being taken to task for "unphysiological denominations" in using the term, I might have chosen another less familiar to many of the most learned and experienced members of the Profession.

Dr. Ridge says, "But had the birth been retarded for another twenty-eight days, making the natural time of a ten instead of a nine lunar months' pregnancy, the child would probably have been a strong and healthy one." If the birth was retarded as long as the Doctor proposes, the child would be, instead of ten lunar months, eleven such months "in utero;" and I don't think it would be better developed.

There is no doubt the term of gestation was the usual one of nine calendar months; and yet all Dr. Ridge's calculations are erroneous.

There was no sign whatever of putrefaction on the solid substance, whatever name it is to be called by.

If you look to my manuscript, I think you will find, after the two questions, the following passage, or words to the effect:—"To which I give the above in reply." Those words, omitted in the printing, would have saved the Doctor the trouble of stating, that my "own case will fully answer the last question, as indeed it may also the first."

It has never been my good fortune to have seen, or even heard, of Dr. Ridge's work on "Physiology of the Uterus," etc.

Mr. Williams's case (Letter 2) bears a good deal of resemblance to mine, differing in a material point,—that the child was "a full-grown, healthy one."

I thank him for its publication.

I hold it to be the bounden duty of every member of the Profession to lay before his brethren the particulars of any unusual occurrence in practice, whereby either science or practice may be benefited.

Mr. Cupiss (in Letter 3) kindly replies to the questions with which my paper, as published, ended. I regret that the line terminating my communication was omitted by the printer, as it would show that the possibility was not alone admitted, but proved.

I have also to regret that Mr. Cupiss, instead of stating that "many well-authenticated cases of this kind are recorded," did not say where they were to be found.

He wishes that I should state some particulars; which I do with pleasure.

The patient's age is about 33; the intervals between each pregnancy varied from three to eight months. She had two abortions within a year, each at about the third month. She has given birth to three children since the abortions. There was not a vaginal examination on the night of the hæmorrhage, it not being deemed necessary.

I lose as little time as possible in making this communication, having this day (15th Feb.) received the Number in which the letter appears, namely, Saturday, February 14.

I am, &c. WILLIAM FOLEY, M.D., M.R.C.S.

Kilrush.

CAPTAIN BEATSON'S ARCTIC EXPEDITION.

[To the Editor of the Medical Times and Gazette.]

SIR,—You are probably aware that a private expedition is now being organised, and is in a few days to start for Behring's Strait, in search of Sir John Franklin. It is under the command of the projector, Mr. Donald Beatson, a captain in the merchant service, who devotes to this purpose the whole available amount of his small funds, as well as his own energies and experience. The expedition requires a medical officer, and I have been asked by Lady Franklin to aid her in obtaining one for this service. Since the qualifications required for such a duty are rare, I have ventured to trouble you with this communication, as by giving publicity to the facts contained in it, the most suitable person would be more certainly met with. Captain Beatson contemplates devoting no less than five years, if necessary, to the search for the lost navigators, although he has the strongest confidence that within that period he shall fall in with them, or solve the intolerable mystery of their fate.

To any one of scientific taste and a love of research, a more interesting field could not be presented, since it is but little known. There is, perhaps, no department of science which could not be enriched,—not even (according to Russian tradition) the study of mankind. In addition to such a taste, and the love of enterprise, there must be a hardy temperament, fitted for a residence in such latitudes, and an active, muscular, and sanguine constitution. It is the more necessary to lay stress upon scientific inducements, and the love of enterprise, since pecuniary emolument must, from the circumstances of the case, be regarded as secondary. The means at Mr. Beatson's disposal are very restricted. He himself makes the greatest personal sacrifices, devoting not only his unpaid services both in the equipment and conduct of the expedition, but also all the private resources he has at command. It is, however, to be remembered, that, in addition to the terms he proposes, the Government reward of 20,000*l.* is still held out, and that this expedition is not unlikely to make a title to it, or at least a part of it, by ascertaining the fate of our missing countrymen.

To be medical officer to such an expedition, is to fill a post of high honour; and he who, with intellectual and physical capabilities for the task, volunteers to accept the appointment, will deserve a rank among the best and noblest examples of heroism of which our Profession can boast. I am, &c.

8, Finsbury-square. WILLIAM W. GULL.

COUNTRY PRACTITIONERS AND THE HORSE-TAX.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am glad to see in your valuable periodical occasional severe strictures on that most unequal of all taxes—the Income-tax. There is one, however, to which we country surgeons have, I think, more cause to object, and which might, I have no doubt, by

drawing up a proper Petition, be easily reduced, if not removed, namely, that on our horses. I give my own case: I pay on 150*l.*; am obliged to keep three horses, the tax on which is upwards of 6*l.*; I cannot afford to marry, and so am condemned to pay double for my man servant. I do not think we should consider ourselves less gentlemen were we allowed to pay tradesmen's taxes for those most necessary and most expensive assistants to our worst paid branch of the Profession. I am, &c.

A Country Surgeon.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

Dr. Murphy, President, in the Chair.

Dr. Manoel Pereira de Sá, of Rio de Janeiro, Dr. Cutler, of Belgium, and Dr. Junod, of Geneva, were elected corresponding members of the Society.

DR. OGIER WARD'S SINGLE-TUBED FEEDING BOTTLE.

This biberon differs from all others hitherto constructed, in having only one orifice, through which the air passes into the bottle from the mouth of the child at the same time that the contents are withdrawn by suction only. This effect is owing to the cork mouth-piece being sufficiently firm to resist the atmospheric pressure, which causes other mouth-pieces, of leather or India-rubber, to collapse like a valve, and to oppose the entrance of air into the bottle. Hence it presents the advantage of not leaking in any position, and may be used by any infant able to feed itself, without fear of its wetting; thus obviating the necessity of a nurse to hold it while in use. The cork mouth-piece has the further advantage of having no disagreeable taste or smell, and is firm enough to resist a bite. The whole instrument is of a convenient shape and size, is easily cleaned, and is inexpensive.

CASE OF EPISPADIAS.

Dr. Bauer directed the attention of the Society to a case of epispadias of a highly interesting nature. Carl Arburg, a German, five feet (Rhenish) high, the youngest of nine well-formed brothers, born of healthy parents, 20 years of age, and apparently in good health and of a strong frame, except his left leg, which is less developed and weaker than the other. The pelvis is deficient, as regards the symphysis pubis and pubal bones, to the extent of three inches. The tubera ischii are also imperfectly developed, and scarcely project; the sacrum and coccyx are greatly curved anteriorly. In consequence of these deficiencies, Arburg, when seated, invariably occupies a reclining posture, and his gait is staggering and fatiguing. There is no umbilicus, not even a mark of it. In the hypogastric region there is a soft and reducible projection, like a rupture, the size of a small fist, encircled partly and above by the edges of the abdominal muscles, and partly and below by Poupart's ligament, which forms an arch across the abdomen. Lower and outward to this projection, corresponding to the inguinal annulus, there are two other rupture-like swellings, in the shape of a chestnut. Between these, in the median line of the body, instead of the mons Veneris, there is a fourth soft and somewhat reddened projection, covered with mucous membrane, being the posterior wall of the urinary bladder, on which the apertures of the ureters are perceptible, from which the urine drops or flows continually, according to the quantity of beverage that has been taken. The right ureter discharges more urine than the left. Moreover, all these parts are not very sensitive. The urine is generally of a slight acid re-action, and colourless; though it continually runs down on the scrotum, the latter never becomes sore or inflamed. The penis does exist, but in a fragmentary form, the corpora cavernosa being absent, while the urethra itself is short and open, like a semi-canal, with the two apertures of the seminal ducts. The urethra ends at the point in a crippled glans of renal form. The whole penis is about one and a half inch in length, but, in the state of erection it is three inches, and enables Arburg to have sexual intercourse with his wife; and, as he asserts, to their mutual satisfaction, but of course without fertility. The scrotum appears in the shape of a roll; it contains two well-organised testicles, the walls being somewhat shortened and thickened. This is the description of the anatomical deficiences in Arburg's urinary and sexual organs. But there remain other physiological circumstances of still higher scientific interest. His beverage, after having been taken, passes from the stomach to the kidneys in the remarkably short time of a few minutes, in its original physical and chemical condition; spirits of wine even may be regained by distillation of the urine. This peculiarity has already given rise to many scientific experiments on the continent. Professor Mitscherlich, of Berlin, has particularly experimentalised with Arburg to a great extent, and has, for instance, found that five grains of hydrojad. kalium, after the lapse of one minute, re-appeared in the urine, and so forth. It is further remarkable, that no poisonous substances in small doses affect Arburg's health at all, though he has taken them fairly, and has submitted to dangerous experiments to a great extent. 2 Arburg may take a considerable quantity of beverage in a short time without the least inconvenience; he has done so already at Vienna, having drunk thirty bottles of champagne within one hour, without becoming intoxicated. Dr. Bauer afterwards alluded to a case of hypospadias which gave rise to all the indications of hermaphroditism, so as even to mislead professional men of note; and he asserted, that, while hypospadias often gave rise to the latter mistake, the sex in cases of epispadias could never be mistaken.

Mr. Canton remarked, that he had seen eight cases of the peculiar malformation described by Dr. Bauer, and there was not any difference in their characters. He had himself made the dissection of one of these, the report of which was published by Dr. Chowne, and he found the symphysis pubis with part of the bones deficient, a ligamentous structure supplying their place. There was a hernia on either side; the testes were small, and the vesiculæ seminales exceedingly so; the urethra was a groove, and the anterior part of the abdominal parietes was absent, with the same condition of the bladder, etc., described by Dr. Bauer. The person in question had been admitted into Charing Cross Hospital as a female, at the age of 23, the sex having been mistaken up to that time; death was caused by pneumonia. The point of interest in these cases was the want of the formative process in the mesial line. Mr. Canton referred also to a preparation in the museum of the Royal College of Surgeons, and to Mr. T. Wakley's case, formerly exhibited to the Society, on which Mr. T. Wakley proposed to perform a kind of rhino-plastic operation.

An essay on

NÆVI MATERNI; THEIR STRUCTURE, PECULIARITIES, AND TREATMENT;

By HAYNES WALTON, Esq., Assistant-Surgeon to St. Mary's, and Surgeon to the Central London Ophthalmic Hospital,

was then read.

Mr. Walton said: Nævus is not, as is commonly supposed, a mere exaggeration or hypertrophy of blood-vessels. Great discrepancy exists among writers, from the indiscriminate employment of the terms "nævus" and "aneurism by anastomosis," and including with these, certain changes in the venous system of a varicose condition, which, strictly speaking, have little relation to either. For surgical purposes, it is better to arrange nævi according to the position they occupy in the body, as subcutaneous, cutaneous, or mixed. The subcutaneous is more or less defined, but may be without definite limits, and, in proportion to its depth from the surface, is of a light bluish tint, or colourless. When deep, it is in all respects like the common fatty tumour, and its true nature may be so obscured as to be overlooked. Several examples of erroneous diagnosis were given. The cutaneous variety is particularly well marked, and varies in extent and level, sometimes being a mere stain, or a conglomerate mass of vessels forming a tumour. A dissection of a nævus by Mr. Birkett, proved that it consisted of areolar, uniting, or fibrous tissue, epithelium, capillary vessels, and vessels of larger calibre. Mr. Birkett concludes, that they should not be called vascular tumours, as they are not made up of erectile tissue, but more closely resemble the corpus cavernosum of the penis. Mr. Paget considers them to be erectile tumours, with this qualification as for all other structures occurring in tumours, that the imitation of the natural tissue is imperfect or partial, also that the likeness these tumours bear to the erectile tissue, as exemplified in the corpus cavernosum penis, is sometimes perfect, of which examples were given, and opinions of Wardrop, Hawkins, Liston, and Rokitansky, quoted to the same effect. There is nothing positively known about their mode of development; pathologists differ. Whether they are always congenital is still disputed. Considering pulsation in them, there is considerable difference of opinion, Mr. Walton's own opinion being, that a simple nævus, however large, does not pulsate, and for arterial thrill to be present, it must be more or less mixed with aneurism by anastomosis. Concerning non-interference, it was remarked, that there is no kind of nævus nor vascular tumour in which there is any certainty of a natural cure, or unattended with the possibility of danger. With the bluish superficial nævus there is greater probability of natural resolution

than in the scarlet kind; in the subcutaneous, still less. A debilitated constitution is favourable to their disappearance. Mr. Walton's own course of proceeding is always to treat a nævus surgically, however small, when it shows any symptoms of increase, recognising that extirpation, slough, suppuration, and adhesion of their intimate structure, are the available processes of cure, which should couple the complete removal of the disease with the least subsequent deformity and destruction to surrounding parts. The manner of their production was discussed. The most simple of all means is pressure, but its application should nearly be restricted to localities that will allow of counter-pressure. Cold, after Abernethy's plan, combined with pressure, is often beneficial, but Dr. Marshall Hall's system of breaking up the interior of the tumour with a needle is a more effective combination. Dr. James Arnott has strongly recommended the freezing of nævi. A plan of cutting and searing nævi by means of platinum wire made red-hot by galvanic battery is now being tried in London, which is a great improvement on Mr. Carron's method of cooking nævi with red-hot pins. Extirpation, with all its dangers, was alluded to, Mr. Walton observing, that there are not many cases in which it should be chosen, and that it was admissible only when the tumour was small, palpably circumscribed, and the surrounding parts healthy. The advantage of escharotics, and their peculiar adaptation to superficial nævi, was pointed out, together with Sir Benjamin Brodie's favourite practice of applying nitrate of silver to the interior of nævi by means of a probe. The injecting of nævi was reprobated, and its dangers exposed. The ligature was spoken of as the most generally applicable plan, as well as that which could be most frequently used in combination with other modes; and a great improvement is, not to allow the tied part to slough off, but to release the ligature as soon as the surface is blackened, and the superficies evince a loss of vitality. When more than one ligature is required, it is better to employ some kind of double tie or knot, which traverses the nævus uniformly, and Mr. Walton's new knot was submitted to the Society. Mr. Curling's improvement of tying nævi subcutaneously was mentioned, and some diagrams given, its advantage being the saving of skin when the surface is sound, and the prevention of contraction, where it would be very injurious. Lastly came the modifications of the ligature, the seton, and the twisted suture,—the seton being followed by less scar than any other known device, except subcutaneous tying. The twisted suture is, perhaps, less useful than any means of tying. A case of mixed nævus on the face was given, to show how this class usually baffles treatment, and it was remarkable as having been treated by several eminent surgeons. When the position of a nævus about the head or face, or the circumstances of it, forbade any of the foregoing means, or when local measures would be unsuitable or unavailing, the tying of the carotid artery on the corresponding side was called for. Mr. Wardrop's remarkable cases were adduced. The peculiarity of venous or cystic tumours, and their supposed development from congenital nævi, were also mentioned.

Mr. Clarke inquired how long it was subsequent to the operation, since Mr. Walton had seen the patient in the case last referred to (one of ligature of the common carotid, on an infant fifteen months of age, for the cure of a nævus occupying the orbit)?

Mr. Haynes Walton replied, that the operation was performed in May last, and the paper read at the Royal Medical and Chirurgical Society about a fortnight since. He had seen the child a week previously.

Mr. Harrison asked Mr. Walton if he had any account of other operations by himself for nævus besides that by the ligature, so as to be able to give a comparative account of their respective value? His late master, Mr. Langstaffe, had tried everything, but finally preferred extirpation, taking care to keep wide of the tumour, so as to avoid cutting the arteries by which he thought it was constituted. He spoke, of course, of the subcutaneous variety.

Mr. N. Ward thought that Mr. Walton had omitted to notice an important practical point in the treatment of nævi by ligature, viz., the incising the skin round the base of the tumour prior to tightening the ligature. He himself had had reason to regret not having practised it, especially in a case of nævus of the labium, the result being, that the ligature was not drawn sufficiently tight, and the whole mass did not come away together, thus requiring a second operation. Besides, when the incision has not been made, the pain is very much greater, on account of the large nervous supply to the dermis. The suffering, then, is not so severe when the incision has been made, nor is the cicatrix so obvious. With reference to the case in which the carotid was tied, Mr. Luke had had a case where there was a large tumour of this kind commencing under the zygoma, which was repeatedly traversed by setons ineffectually. At last he tied the common carotid, and, after that, although the tumour did not decrease, it ceased to increase, which had been the case previously from birth.

Mr. Gay said, the subject of Mr. Walton's paper was one of great interest to every practitioner, as these cases were of frequent occurrence. The attention of the surgeon is often drawn to them early, when their progress can generally be checked. Their tendency is to increase in size, although at times their growth may suddenly be checked. He was consulted some time ago respecting a subcutaneous nævus, which extended all over one side, from the sternum to the vertebræ. It had gradually undermined the patient's strength, and she was willing to submit to any operation to get rid of it. Several medical men were consulted, and he had understood that an attempt had been made to remove a portion of it by the ligature, but that the patient sank under it. This surely afforded a sufficient reason for attempting their cure early—in fact, during infantile life. A great many different means had been used for their cure, but they were not remarkable for their efficiency. These tumours appeared to him to be what Dupuytren called vascular growths—growths of a special tissue. Those he had examined he had always found nourished by one large vessel, with, of course, other smaller ones assisting. He remembered the case of a child, in whom the nævus covered nearly one side of the face; the tumour seemed to be movable, perfectly unattached, and he could not find any deeply-seated vessel supplying it—perhaps because the child was very fat. He was induced, on the opinion of several friends, to ligature the common carotid; the tumour afterwards diminished considerably in size, but did not disappear. He then employed compression, by means of a pad, which kept it under, but the child died of an affection of the lungs at the end of four months—a result which is not uncommon after the ligature of the common carotid. After death the parts were examined, and a large vessel springing from the common carotid was found entering the base of the tumour. The supply by this was of course cut off by the ligature of the great artery; but the tumour must have been nourished by other vessels, and thus the opinion he had emitted was supported, that these tumours are vascular growths, surrounded by cysts, and nourished by one principal vessel, aided by other smaller ones. Acting on this view, he regarded Mr. Walton's plan of treatment as the best, and that all the others were useless: some of them, indeed, he thought injurious. It was much better to cut off the supply of blood by strangling the tumour at its base; and he also agreed with Mr. Ward as to the utility of incising the skin before drawing the ligature tight. Great suffering, much irritation, and some danger would be thus avoided. He would not again practise ligature of the carotid for nævus: it was too dangerous. He could not admit that its effects were so fortunate as Mr. Walton represented them to be, as he was of opinion, that the children so operated on ultimately die of affections of the head or lungs. Mr. Clarke's question was a very proper one, as these results are not immediate upon the operation. Mr. Gay concluded, by referring to a kind of nævus met with in elderly people, which he described as "varicose capillaries," and said he did not know its appropriate treatment.

Dr. Crisp inquired of Mr. Gay, what treatment he had practised before he had recourse to the ligature of the common carotid, and also whether he knew of any case in which that operation had been successful, as he understood him (Mr. Gay) to say that only one artery supplied the nævus?

Mr. Gay, in reply, stated, that Dr. Crisp had misunderstood him; he had said, that nævi had one principal artery, but were also nourished by several smaller ones, so that the ligature of one vessel is not sufficient; it is requisite to strangle the tumour round its base.

Mr. Roberts mentioned a case of nævus on the chest, on which he had applied a vulcanised India-rubber pad, which he thought would prove useful. He did not yet know the results.

Dr. Chowne could not entirely admit Mr. Gay's theory; he thought that a nævus was a congeries of arteries, although certainly one might be larger than the rest.

Mr. Gay explained, that these tumours have a great tendency to increase, throwing out processes in different directions, and that, as they enlarge, so do the vessels supplying them, the principal one enlarging so as to carry sufficient blood to answer nearly all the demands of the diseased growth.

Mr. Clark (of Bayswater) asked Mr. Walton at what age he would recommend this operation for infants, who, in general, do not bear operations well? Of course he did not allude to cases where an immediate operation was imperative.

Mr. Canton eulogised the paper, which had, indeed, left little to say. He commended the incision of the integuments at the base of these tumours; and added, that there was very little doubt that much mischief, even to the death of the patient, might follow the inclusion of that delicate texture in the ligature; and he compared

the proceeding to the ligature of piles, which occasionally assume a cavernous structure; if a ligature be applied in such cases, then the incision of the skin would also be advisable. He (Mr. Canton) had practised thus lately on a lady, in whom he had operated on a pile, which could be easily emptied, but the blood readily returned into it with a "thrill," as if it were passing into a cribriform mass. He had incised the skin, and applied the ligature in the groove. It caused very little pain, and the patient soon got well. A similar plan might be carried out as regarded the use of the mineral acids in nævi: they should be applied around the base, so as to constrict and consolidate the textures. Vaccination was of no use except the nævus be small. He had not found the distinction spoken of by Mr. Gay in the nævi of elderly people. They resembled in all things the subcutaneous nævus they had been discussing.

Mr. Haynes Walton had no statistical information to furnish Mr. Harrison such as he desired. He asked how Mr. Langstaffe had tied the nævus, whether by a ligature round the base of the tumour?

Mr. Harrison replied in the negative; Mr. Langstaffe used two ligatures.

Mr. H. Walton had seen few nævi he was unable to treat by ligature, and those few he would not extirpate; few if any would perform that operation if they could help it. He had described the incision of the skin alluded to by Mr. Ward; he had spoken of a channel round the base, but he preferred reflecting the integuments, as they may otherwise slough. He thought Mr. Gay had treated the question of the ligature of the carotid very briefly. He (Mr. Walton) had been successful with it in an infant fifteen months old, and Wardrop and Chelius had also had favourable cases. With regard to the age of the child, he should not hesitate to operate when the infant is a few months old, unless the nævus were very large indeed. He had also stated that vaccination was useless in the treatment of this disease, unless the nævus were of small size.

Mr. Walton afterwards showed the application of his ligature.

ASHMOLEAN SOCIETY.

Dr. Daubeny communicated to the Society a description of a new and improved method, invented by Baron Liebig, for

DETERMINING THE AMOUNT OF UREA IN URINE.

It consisted in the addition to the liquid of a measured quantity of a solution of the nitrate of binoxide of mercury, which forms with urea an insoluble salt, consisting of one atom of nitrate of urea to four of the binoxide of mercury. It is only necessary to neutralize, by some alkali or alkaline earth, the nitric acid disengaged by the action of the urea upon the re-agent applied, without which some of the precipitate would be re-dissolved. This method appears at once the readiest and the most exact that has been yet proposed for the determination of urea, and, by suggesting it, Baron Liebig has added materially to the services already rendered by him to animal physiology, in thus enabling medical men to watch with precision the changes that occur in this important constituent of the urine, whether in health or in disease. But, in thus noticing the advances made to our knowledge of the functions of life through the instrumentality of chemistry, Dr. Daubeny could not refrain from dwelling a little upon the scientific merits of an old and valued friend of his own, now deceased, who led the way in this path of research, and deserves to be commemorated, both for his important contributions to chemistry in general, and likewise for the light which his researches first cast upon many obscure processes of the animal economy. He alluded to Dr. Prout, whose labours, however, in the cause of science he would not take up the time of the Society by particularising, inasmuch as a pretty faithful and detailed abstract of his principal papers had already been given to the world in a late number of the *Edinburgh Medical Journal*. (a) He would, however, briefly allude to two qualities which eminently distinguished his philosophical character, and which, by their happy combination, enabled him to render subservient to the unfolding of grand general truths those minute pathological inquiries, which his Profession prompted him to undertake, but every one of which, when once entered upon, was worked out by him with the patience and exactness of a philosophical problem. The first of these characteristics was that capacity for accurate observation, which, coupled as it was in him with the most conscientious regard to truth, inspired such a confidence in his published results, that their correctness has seldom been impugned by those, who, with the lights of improved knowledge, have since followed in his footsteps. It is, indeed, the great boast of Liebig, that he has so improved the methods of analysing organic bodies, that a young man of ordinary attainments can now, after a few months' training, complete an analysis, which may be appealed to with confidence, and received as the basis for further research; whereas before, only adepts in chemistry were capable of bringing out results upon which any reliance could be placed. Yet the greater part of Dr. Prout's analyses were made with an apparatus of his own, which, however ingenious it might be, was far more difficult to use, and required for its success many more precautions, than that at present in the hands of chemists, and hence the precision to which he attained is the greater subject for commendation. Add to which, that these delicate investigations were carried on by him unassisted, amid constant interruptions, at intervals snatched from the daily demands made upon his time by professional engagements. The second characteristic of his genius was that power of generalisation, that aptitude of combining into an harmonious whole, a number of isolated and independent facts, which led him to seize upon the remote consequences deducible from the results of his own observations, as well as those of others, and at the same time to shape his inquiries in such directions as might lead to the development of great principles in science. Thus, for instance, so far back as the year 1815, he published that remarkable paper on the relation between the specific gravity of bodies in their gaseous state, and their atomic weights; in which he pointed out, within a few years after the promulgation of the Daltonian theory, that the atomic weights of all other bodies may be regarded as multiples of that of hydrogen,—a position which, after being disputed by Berzelius and other great authorities, came, at length, to be confirmed with respect to three of the most important elements, carbon, oxygen, and azote, by the researches of Dumas and others. Thus, at a later period, his delicate method of weighing the air enabled him to suggest a cause for the prevalence of the cholera then raging in London, namely, the addition of an ingredient to the ordinary constituents of the atmosphere, which increased the specific gravity of its lower strata over that locality. It may be mentioned, as a proof of the admirable caution which he evinced with regard to facts, even when tempted by the support they would have yielded to any of those ingenious speculations with which his mind was ever teeming, that although he was understood to have continued the meteorological researches alluded to during the whole period of the visitation of the cholera in 1832, he delayed their publication until they could be still further corroborated. Unfortunately, when the cholera broke out a second time, in 1848, his health was too much enfeebled to allow of his undertaking, in addition to a large medical practice, a similar course of laborious investigations, so as to satisfy his own scrupulous mind as to their truth. Dr. Prout also suggested an explanation of the differences existing between organic bodies, whose constituents had appeared identical, by the interference of infinitesimal portions of certain extraneous substances intermixed with their predominant ingredients, and started the idea, which Liebig has followed up with so much success, that these latter may be of essential use, inasmuch as they render the body itself suitable to be assimilated by animals, owing to their counteracting in it those chemical affinities between its particles which would otherwise be too powerful for the antagonistic forces of life to surmount. Substances so constituted he called *merorganised*, and the introduction of these foreign matters he regarded as the cause of that new arrangement of their particles, which imparted to them properties altogether distinct from those which before characterised them. Thus, starch he regarded as merorganised sugar, and considered the latter body to be incapable of assimilation until it had undergone an alteration of this kind within the body. Dr. Prout also led the way towards the establishment of that beautiful classification of substances subservient to nutrition, which Baron Liebig has lately brought so prominently forward, and made the foundation of so many striking and beautiful speculations. His paper on "The Ultimate Composition of Simple Alimentary Bodies," shows, that they are divisible into three kinds, namely, the saccharine, the oily, and the albuminous, and that the milk which nature has provided for the support of the young in mammiferous animals, is alone capable of sustaining life, because it contains all three. Thus, while the former inquiry of Dr. Prout's contains the germ of one great principle so insisted upon by Liebig; namely, the necessity for those minute quantities of mineral matters which are found to be present in plants, the latter suggested the groundwork of the baron's other great work, in which he has explained so luminously the nature of the proximate principles required for the nutrition of animals. With regard to inquiries more purely medical, Dr. Prout first gave a clear idea of the constitution of the urine, and showed that the secretion of urea took place in the

(a) July, 1851.

blood-vessels, and that it was merely eliminated by the kidneys. By ascertaining that the urine of reptiles consists wholly of uric acid, he took the first step towards pointing out the relation between that body and urea, which latter, Liebig supposes to be produced in warm-blooded animals, through the oxygenation of the former compound. While, by this train of research, he threw so much important light upon the physiology of calculous and other urinary disorders, he advanced at the same time our knowledge of digestion itself, by his discovery, that the stomach in a healthy state always contains free muriatic acid. Hence probably the necessity of salt for all the higher animals.

Such are a few of the great principles, either suggested or worked out by Dr. Prout,—contributions to physiological science important enough to establish his reputation as a great original thinker, as well as an accurate and scrupulous experimentalist. His two principal publications, namely, his "Bridgwater Treatise," and his work on the "Stomach and Urinary Diseases," are each characterised by a very high, although a distinct order of merit. The former not only evinces a thorough mastery of the details of his subject, but also much ingenuity in unravelling the mysteries which beset us when we attempt to speculate on the intimate constitution of matter. While soaring into this elevated region, he caught a glimpse of those views respecting the distinction between *physical* and *chemical* atoms, from the development of which Dumas has since derived so much celebrity. On the other hand, in his latter Work, dedicated to the relief of human suffering, he has abstained as much as possible from such speculations, and has evinced an exemplary caution in confining his practical deductions strictly within their legitimate limits, at the same time that he has displayed a profound sagacity in the discrimination and treatment of the diseases which fell within his province.

ETHNOLOGICAL SOCIETY.

ON THE ETHNOGRAPHY OF AKKRAH AND ADAMPE, WEST AFRICA.

By WILLIAM F. DANIELL, M.D., F.R.G.S.

The author of the above paper was the medical officer attached to the troops sent to take possession of the Danish forts and settlements on the Gold Coast, recently purchased by the British Government; and during the term of his service in these localities enjoyed favourable opportunities for investigating the social conditions and customs of their native populations. The first of these countries is better known along the coast by the aboriginal name of Ghan, or Gha; but the title of Akkrah, by which it is generally recognised by Europeans, is a modification of the Fante term "Inkran" or "Inkara," which signifies an ant, and which has doubtless been bestowed on account of the great number of termite hills that abound in the neighbourhood. The circumjacent country affords a very beautiful and diversified prospect, resembling, to a certain extent, one of those irregular prairies of Southern Africa, which, clothed with grass and flowers, are dotted at intervals with isolated thickets and clumps of trees. The soil is exceedingly rich and fertile, producing, almost without the aid of human labour, an abundance of vegetable food, fully supplying all the wants of the inhabitants. The aboriginal races are a much finer class of people than the Fantes, but, from their numerical inferiority, could not be advantageously contrasted with them, and, as they are gradually declining, will soon become extinct or amalgamated with the surrounding tribes. The author next proceeded to offer a few remarks on those indirect agencies which had modified the moral and physical characteristics of the native populations, and adduced evidences to show that the tribes located on the maritime regions were less subject to warlike convulsions, pestilential visitations, the subjugation of more potent nations, and other depopulating calamities, than those in central Africa. After a detailed description of the various kinds of dress and ornaments in common use, which were similar to those of the Fante and Ashantes, he remarks that the precepts of cleanliness are nowhere more strenuously advocated than by the Akkrahs, though a great scarcity of fresh water prevails; and therefore they are less liable to cutaneous and other disgusting diseases, so often noticed in other parts of the coast. Polygamy exists to a wide extent, and the women are extremely prolific; but their children seldom attain any great age. Abortion is often induced, and is not unfrequently followed by death among the younger females, from the powerful emmenagogues administered with this object. The women are not celebrated for their chastity, and criminal *liaisons* are consequently common; their detection, however, is punishable by heavy fines, according to the rank of the offender, and not by death, as is elsewhere the practice in other countries of Africa. Children receive their names on the eighth day after their birth, and from the day of the week on which they are born; and the mother, during the period of her gestation, resorting to some popular Fetish temple, to bathe in those consecrated waters which are supposed to be endowed with the power of ensuring their safe delivery from the perils and disasters of parturition. The male children of Akkrah and Adampe are circumcised about the eighth or ninth year, and the custom is comprehended under the local definition of *koteah*. The operation is performed by native doctors, who exclusively practise this branch of surgery; their process consists simply of protecting the glans by tying a ligature round the prepuce, which is then cut through by one stroke of the knife. The wound is subsequently dressed with cotton steeped in oil, and the parts defended anteriorly by a wicker mat suspended by a cord, and laterally supported by the hands. The late Dr. Pritchard was led into an error, when he asserts, that this rite pertained *utrinsque sexus*. On the contrary, it is unknown, and another usage of quite an opposite character is followed by the women of Crobo, which apparently resembles the one so much in vogue among the Amazons and other females of Dahomey, viz., *elongatio nymphæ artificialis*. The development of puberty in the girl is not promulgated in Akkrah and Adampe by any of those public ceremonies and customs so prevalent in the Fante provinces, but is chiefly guided by the peculiar modes of dress. Marriages are not allowed to be contracted within certain degrees of consanguinity on the female side, nor is a man permitted to marry two sisters. The nephew generally, by the sisters' side, succeeds to the property, in the absence of any nearer relations, before those children of his uncle, and this law is generally diffused throughout many kingdoms of inland Africa, and is that which regulates the succession to the Ashante throne. A younger brother, after the decease of his elder, succeeds to all his wives and property, which was in exact accordance with the ordinances of the Mosaic institution and other semitic nations. Great distinctions are observed with reference to children of mixed marriages,—thus, if the mother is a slave and the father free, the child belongs to the owner of the mother, and is likewise a slave; but if the mother is free, the reverse law is adopted. Pawns, and other people who die heavily in debt, are denied the rites of sepulture, and are exposed on elevated stages till the creditors are satisfied; the same ordinance also prevails amongst the Ashantes as it did with the ancient Egyptians. People after death are interred within their houses, and a solemn custom is instituted on the occasion, to which the relatives and friends of the deceased give their due attendance; but the slaves are generally buried on the outskirts of the town, and in former times were sacrificed in great numbers at the funeral obsequies of their masters; but the British Government have since humanely abolished such barbarous rites. Another curious observance, derived from their superstitious dread of witchcraft, is the exhumation of the corpses of those who have been suspected during their life of employing supernatural agencies. Such individuals are considered to be endowed with the potent prerogative of generating disease and pestilence after their death; and when any mortality therefore occurs among the population from the inroads of some epidemic, or the ordinary maladies of the season, they are deemed to be the source of these inflictions, and are branded with the title of posthumous murderers, their graves are violated, and the remains burned on the outside of the town and ignominiously scattered to the winds. When any inhabitant dies in a distant land, and a favourable opportunity offers, the relatives consider it a sacred duty to search for his grave, and carefully bear the frail tokens of mortality to his native town, there to be interred among those of his friends and kindred. A great number of other singular customs exist, and have been described by the author, which our limited space precludes us from noticing, but, as we understand they are to be published *in extenso* in the "Transactions" of the Society, we must refer our readers to them when accessible. The author has, we think judiciously, reserved for a second series of papers, his observations on the physical conformation and other physiological considerations connected with these native tribes, which, we trust, will soon be given to the public, as our information on the African races at the present date is of a somewhat limited character.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 19, 1852:—

BROWN, THOMAS JOHN EAMES, Dorchester, Dorset.
RHODES, GEORGE SAMUEL, Dewsbury, Yorkshire.

Royal Medical and Chirurgical Society.—The following gentlemen were elected Fellows of the Society on Feb. 24:—James Luke, Esq.; George Pilcher, Esq.; Christopher W. T. Robinson, Esq. Thomas Cutler, M.D., and Charles Lodge, M.D., were proposed. At the next meeting, March 9, the following gentlemen will be balloted for:—Alfred Baker, Esq.; William Davies, M.D.; John Roberts, M.D.; Sherard Freeman Statham, Esq.; Henry Thompson, Esq.; John Wiblin, Esq.

Obituary.—At Edinburgh, on the 12th inst., Thomas Hogg, Esq., formerly surgeon to the 76th regiment.

Naval Appointments.—Surgeon Alexander Anderson, M.D. (1842), to the Polyphemus steam-sloop, at Woolwich, for service on the coast of Africa; Assistant-Surgeon W. M'Donald, M.D. (1842), to the Polyphemus; Surgeon-Superintendent Lenox T. Cunningham, M.D. (1840), to the Sir Robert Seppings, convict-ship. Assistant-Surgeons Thomas J. Breen (1847), recently of the Ganges, 84, to Plymouth Hospital; Donald G. Pendrith (1850) confirmed to the Sampson, steam-frigate; Robert Creighton (1850), confirmed to the Trafalgar, 120, on the Mediterranean station; Surgeon Frederick M. Rayner (1851), to the Herald, 28, at Chatham, fitting for survey service in the South Seas; Surgeon Robert M'Cormick (1827), to the North Star, for the Arctic expedition; Assistant-Surgeon John D. Macdonald (1849), from the Royal Naval Hospital at Plymouth, to the Torch, steam-vessel at Woolwich, fitting as tender to the Herald.

Naval Promotion.—In consequence of the successful storming of Lagos, Mr Frederick Foster Morgan, assistant-surgeon, has been promoted to the rank of surgeon. All the medical officers of the squadron were highly commended in the despatch received from Commodore Bruce.

University College and the University of London.—On Wednesday the usual Annual General Meeting of the proprietors of University College was held at the College in Gower-street. The chair was taken at three o'clock by Sir James Graham, M.P., when there were about fifty of the proprietors, present. After the transactiou of some routine business, the Annual Report was read. The total income of the year, including a loan of 3500*l.*, amounts to 17,172*l.*, and the expenditure to 16,561*l.*; leaving a balance of 591*l.*, which has been invested. The number of students during the session 1850—51 was, in the faculty of medicine, 200; and the faculty of arts, 243; which, with the 304 pupils in the junior school, gave a total of 747. The fees paid by the students during the same period amount to 6796*l.* The sum of 951*l.* received as fees for the clinical lectures had been paid to the hospital connected with the University. The Report acknowledged the receipt of several valuable and important legacies; among the latter was a collection of Chinese books from Mr. Morrison, and the orrery manufactured by James Fergnson, the self-taught natural philosopher. The library now contains 38,056 volumes on general, and 3669 on medical subjects. The Report was received, adopted, and ordered to be printed. The Lord Mayor proposed, with the greatest gratification, a resolution conveying the thanks of the proprietors of the College to Miss M. Denman, for the generous donation of the Flaxman Gallery. Mr. Hume seconded the resolution. The resolution was then put and carried unanimously. On the question for the re-election of the officers of the College, the ballot having already taken place, and the election therefore being over, Mr. J. R. Quain submitted a question of deep interest to the welfare of the Institution and to the interests of the proprietors. The question was, the state and condition of the University of London. After a most able and temperate speech, which was greeted with loud cheers, he moved:—"That this meeting is of opinion, that the time has arrived for reconstituting the University of London, on the basis of the admission of the graduates to a recognised position in the corporate body. That the Council be respectfully requested to transmit the above resolution to the Home Office and the Senate of the University." The resolutions having been seconded; Mr. Sharpe said, he approved very highly of the judicious and temperate proposal made by Mr. Quain. Mr. Richard Taylor confirmed the statement made by Mr. Quain. The resolutions were carried in the affirmative, with only two dissentients. Mr. Hume thanked Mr. Quain, and regretted that any individual should have attempted to throw difficulties in the way. Mr. Hume then moved a vote of thanks to Sir James Graham. The motion having been seconded, Sir James Graham said, he could assure the meeting that he felt the highest gratification from the expression of thanks which had been offered him, but more especially because it had been brought forward by his old friend Mr. Hume. He (Sir James) had heard with extreme satisfaction the speech of the gentleman who had made the motion. (Cheers.) He had seldom heard a motion brought forward in a more temperate, just, and satisfactory manner. Progress once made in anything can never be rescinded. (Loud cheers.) With respect to the proposition which had just been adopted, he would remind the meeting that the Senate of the University derived its powers from the Crown, that they are not the responsible advisers of the Crown. The question was only one of time, and would before long be settled. It was difficult to fix the precise period when such a step ought to be taken, but he felt convinced that before long corporate privileges such as those possessed by the Universities of Oxford and Cambridge would be granted by the Legislature to the University of London. (Cheers.)

University of Oxford.—The new Regius Professor of Medicine, Dr. Ogle, delivered his introductory lecture on the 19th instant, in the Clarendon lecture-room.

City of London Hospital for Diseases of the Chest.—This building in the Victoria-park has lately made great progress towards completion; it is now nearly ready for roofing. Its exterior features are of a bold, substantial character, indicating the permanent usefulness of the Institution, rather than an exhibition of architectural skill. The anniversary dinner is to be on the 16th of next month, Earl Granville, late Foreign Minister, presiding.

Deaf and Dumb Asylum.—Mr. Joseph Toynbee has been appointed Consulting Aural Surgeon to this institution,—the largest establishment of the kind in the world, having admitted during the sixty years of its existence between two and three thousand patients. We believe this is the first time a surgeon has been appointed to examine the children as to the nature and causes of their deafness.

Charity for Hospital Purposes.—The Board of Management of the Asylum for Idiots have received the munificent donation of 400*l.* from an anonymous benefactor.

Medical Benevolent College.—The Lord Archbishop of Canterbury, the Lord Archbishop of York, and the Lord Bishop of London, as Trustees of the Cholmondeley Charities, have this week forwarded to the Treasurer of the Medical Benevolent College the sum of 100*l.*

Prosecution by the Society of Apothecaries.—Mr. James Scott, surgeon, of Killingworth, was recently proceeded against, in the County Court at North Shields, before Mr. Losh, barrister, by the Society of Apothecaries of London, to recover two penalties of 20*l.* each, with costs, for practising as an apothecary without having first obtained their licence so to do. It appeared in evidence, that Mr. Scott, who has a Scotch qualification only, is practising at Killingworth among the miners, where he has an extensive but low practice, he being in possession of large contracts to attend the pitmen and their families at sixpence a fortnight—that money being duly stopped from the miners' pay by the under-viewer of the colliery. Mr. Scott had thus contracted with a large number of men at the Killingworth and Gosforth Collieries, and for such attendance, etc., he, not being duly qualified according to law, was now proceeded against. Formal proof of his attendance was furnished in two cases; but in one it was alleged that the action was barred by the lapse of six months since the defendant attended the patient; in the other, judgment was given against Mr. Scott for the full penalty of 20*l.* and costs which he was ordered to pay at the end of two months. This is the first time we have heard of the lapse of six months since the professional attendance being a bar to an action to recover this penalty. In the higher courts, we believe, it has not hitherto been so alleged; and we are doubtful if so short a lapse of time can be held as a sufficient bar in the County Court.

Hong-kong.—The sanitary state of this settlement is reported to be greatly improving; the deaths among the military in December last were five against seventeen in the same month in the preceding year.

The Arethusa.—The report on the sufferers from small-pox in this vessel, states that Mr. Dillon, 2nd master, is recovering; Neilson, A.B., dead; another sailor in a dangerous state; the others doing well. No new cases.

Sanitary Measures.—Unwholesome Meat.—A meat salesman, in a large way of business, was summoned lately before Sir R. W. Carden, for having exposed and offered for sale certain meat which was unfit for human food. The meat was described as two quarters of beef; but the defendant, who laid all the blame on his foreman, and said he (the foreman) should pay the fine, stated, that he knew nothing of the matter, that it was not beef at all, but the quarters of some starved or starving animal,—what it was he did not say, perhaps of a horse or jackass. The magistrate did not credit the defendant's excuse, reprimanded him in severe language, pointing out the serious consequences that might have ensued had not detection followed hard on the heels of commission, and fined him 5*l.*

DRUGS FOR THE MERCHANT SHIPPING.—In answer to a question by Mr. J. Bell, the President of the Board of Trade stated in the House of Commons, the other night, that he had not been able to appoint inspectors of the medicines furnished to merchantmen and emigrant ships, for want of funds. The list of medicines approved by Sir W. Burnett, had been sent to various local marine boards for their opinions. Thus if the Board of Trade had money enough, there would be a few snug berths for sundry chemists and druggists. Why have not the medical profession a Member in the House to look as sharply after their interests as the druggists have in the election of St. Albans. Let them look to it.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—An extraordinary General Court of this Society was held in Berners-street on Wednesday evening, the 18th inst, to ratify an agreement entered into by the Court of Directors with the Royal Medical and Chirurgical Society for the hiring of apartments in their house, No. 53, Berners-street. The Chairman, Martin Ware, Esq., V.P., explained the object of the meeting, as stated in the summons sent to each member. The Society, founded in 1788, had gradually increased in its income, expenditure for relief, and general business, and some fixed place for transacting its affairs had long ago become necessary. It might be expected that the obtaining offices in the house of the first Medical Society of the metropolis would tend to make the Society better known to the Profession, and to extend its usefulness. The Secretary, Mr. Walsh, read the details of the negotiation which had been entered into. The members present then adjourned from the library to inspect their proposed rooms, which gave general satisfaction. They consist of a room for meetings of Directors, Committees, etc., and an office for general business, where attendance will be given at stated times, with power to hold General Courts in the library when required. Mr. Propert moved a resolution to ratify the agreement entered into. Mr. Walne moved a vote of thanks to the Committee for the pains they had taken, and Mr. Stone a vote of thanks to their respected Chairman, mentioning also the part taken in the negotiation by Dr. W. Merriman, the Acting Treasurer. All these resolutions were carried unanimously. The annual dinner was announced to take place on Saturday, April 17th, and the services of several gentlemen were acquired as stewards.

DYSON *v.* DYSON.—This was a case, heard in the Vice-Chancellor's Court, before Sir G. Turner, so far resembling the notorious Gardner peerage cause, that its main point depended on the duration of the period of utero-gestation, it being alleged, that the plaintiff, an infant, though born in wedlock, was not the child of Dyson, the defendant. It was proved in the cause, that the alleged father left his wife in the island of Madeira in February, 1849; that she returned to England in the August following, and that the plaintiff was born on the 8th of January, 1850, being a period of 336 days (or 11 months 6 days—each month comprising 30 days) after the father had left Madeira. Mr. Hare, for the plaintiff, read the evidence of several medical witnesses of eminence, who deposed to the possibility of the period of gestation being protracted to a period of 330, or even of 336 days, and referred to a case in which a foreign court had decreed a child born 333 days after access, to be entitled to the succession. The Vice-Chancellor referred to the Gardner peerage case, in which a period of non-access considerably shorter than the period in question had been held by the House of Lords to be decisive against the legitimacy of the child, and said that he could not make a decree in favour of the plaintiff on the present evidence; but the plaintiff was entitled to an issue, which, however, his counsel declined, and the bill was dismissed. It appeared that the possession of a share of a large landed and personal estate was involved in the affair.

MEN WITH TAILS.—M. Castelnau, in a pamphlet on Central Africa, presented to the Parisian Academy of Sciences, states, that when at Bahia, in Brazil, he received information from several slaves of the existence of a race of men with tails. One slave, named Mahommah or Manuah, a man remarkable for his intelligence, told him they were called Niam-Niams, and that he had seen them, and entered into minute details respecting them. Negroes of the Soudan or Nigritia also stated as much. Mahommah said that he belonged to a tribe called the Haousta, and once formed part of an expedition sent against the Niam-Niams. After crossing some lofty mountains, they one day arrived at a spot where a band of the Niam-Niams were sleeping in the sun. Creeping towards them without noise, they massacred every one. On examining the bodies, each was found to have *a tail about a foot in length, and an inch in diameter*. They were smooth and glossy. Other bands were afterwards met with the same appendage, and slain. One of these bands, when attacked by the Haoustas, was occupied in eating human flesh, and the heads of three men, suspended to stakes, were roasting in a fire round which they were seated. The men are said to be well made, and have woolly hair. Their arms are clubs, arrows, and spears; and they cultivate rice, maize, and other grain. If these Niam-Niams are not orang-outangs, their existence would serve to support the new-fangled doctrine of progressive development. As M. Castelnau has been frequently employed by the French Government in scientific missions, it cannot be supposed that he is a party to any fraud, but it would appear from the tale he records, that he is somewhat gullible. It is not at all feasible that so singular a race of *Monboddoes* should exist even in Central Africa, and no specimen yet received in Europe. More and better evidence than that of slaves is requisite to establish the existence of Niam-Niams in Africa or anywhere else.

MORTALITY IN HOSPITALS, ASYLUMS, AND WORKHOUSES OF LONDON.—1851.

Number of Cases treated; Inmates resident, or Population; Deaths; Term of Residence; Deaths to 100 *cases; and Annual Deaths to* 100 *of the population.*

No of District.		Total Cases Discharged, Cured, or otherwise, or Dead, 1851.	Average Term of Residence in Institution.	Average Number of Inmates in Institution.	Deaths—1851.	Deaths to 100 Cases.	Deaths to 100 Beds assumed to be continually occupied.
			days.				
	TOTAL	138247	92	34766	8169	5·91	23·50
	Workhouses	52441	149	21435	4919	9·38	22·95
	General Hospitals	29857	84	2762	2266	7·59	82·04
	Hospitals for Special Diseases	2212	42	254	254	11 48	100·00
	Lying-in Hospitals ...	817	25	57	7	·86	12·28
			years.				
	Lunatic Asylums	2233	1 88	3748	394	17·64	10·51
			days.				
	Military and Naval Hospitals	9495	22	584	228	2 40	39·04
	Hospitals and Asylums for Foreigners	556	46	70	31	5·58	44·29
	Prisons	40636	53	5857	70	17	1·20
	General Hospitals:—						
3	St. George	2650	38	275	255	9·62	92·73
4	Westminster	1565	31	131	119	7·60	90·84
5	Charing-cross	1195	31	100	79	6·61	79·00
7	Middlesex	2327	40	255	173	7·43	67·84
9	University College ...	1105	28	86	116	10·50	134·88
9	Royal Free	894	23	57	40	4·47	70·18
13	King's College	1213	32	106	120	9·80	113·21
18	St. Bartholomew	5950	32	522	444	7·46	85·06
22	London	4071	28	308	258	6·34	83·77
27	Guy's	4530	38	475	424	9·36	89·26
27	St. Thomas	4357	38	449	238	5·46	53·01
	Hospitals for Special Diseases:—						
10	Small-pox	682	22	41	102	14·96	248·78
10	Fever	739	38	76	84	11·37	110·53
1	Lock	359	43	47	...	...	...
1	Consumption	432	76	90	68	15·74	75·56
	Military and Naval Hospitals:—						
4	Grenadier Guards' ...	1319	20	74	32	2.43	43·24
4	Coldstream Guards' ...	932	18	47	20	2·15	42·55
4	Scots Fusileer Guards' ...	790	80	65	21	2·66	32·31
35	Royal Ordnance	4222	22	260	47	1·11	18·08
36	Dreadnought Ship ...	2232	23	189	108	4·84	77·70
	Lunatic Asylums, &c:—						
			years.				
16	St. Luke	211	·91	193	20	9·48	10·36
20	Hoxton-house (Miles's) ...	190	1·90	361	29	15·26	8·03
21	Bethnal-house (Warburton's)	216	2·43	535	56	25·93	10·47
25	Grove-hall (Bow)	345	·86	298	32	9·28	10·74
29	Bethlem	335	1·17	391	30	8·96	7·67
32	Surrey New County ...	289	2·87	830	121	41·87	14·58
33	Peckham-house	303	1·27	384	32	10·56	8·33
33	Camberwell-house... ...	202	1·56	316	42	20·79	13·29
	Other small Asylums ...	142	3·11	441	32	22·54	7·26
	Number of Columns...	1	2	3	4	5	6

—*Registrar-General.*

DEATHS *in the Metropolis for the week ending Saturday, February* 21, 1852.

Causes of Death.	Feb. 21. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	452	383	237	1072	10845
Specified Causes	452	382	237	1071	10797
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	142	42	8	192	1970
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	4	30	22	56	551
3. Tubercular Diseases	68	133	12	213	1864
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	57	26	37	120	1309
5. Diseases of the Heart and Blood-vessels	3	34	17	54	405
6. Diseases of the Lungs and of the other Organs of Respiration ...	93	54	56	203	2256
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	24	19	7	50	580
8. Diseases of the Kidneys, &c. ...	...	6	8	14	108
9. Childbirth, Diseases of the Uterus	...	6	1	7	110
10. Rheumatism, Diseases of the Bones, Joints, &c.	2	5	3	10	87
11. Diseases of the Skin, Cellular Tissue, &c.	...	1	1	2	12
12. Malformations	1	...	...	1	33
13. Premature Birth and Debility ...	23	...	...	23	227
14. Atrophy	18	...	1	19	161
15. Age	...	...	55	55	683
16. Sudden	2	5	4	11	140
17. Violence, Privation, Cold, and Intemperance	15	21	5	41	300
Causes not Specified	...	1	...	1	48

Small-pox in the Arethusa, R.N.—The Arethusa frigate, R.N., Captain Symonds commander, has arrived at Plymouth, from Lisbon, with the small-pox on board. The disease broke out while in the Tagus, several days prior to her departure, and six of the infected were landed there. No deaths have occurred. After a consultation betwcen the Port Admiral, Sir John Ommaney, and Dr. Rae, Inspector of the Royal Naval Hospital, it was determined to send the twelve cases now on board the frigate to that establishment. A subsequent report states that eleven of the cases are doing well; the twelfth exhibits some dangerous symptoms. Other cases have since been conveyed to the hospital. Besides small-pox, there are two or three cases of low fever; in all other respects the crew are perfectly healthy. The frigate will be cleared out, fumigated, and have a complete refit. No cases of sickness are reported from Commodore Martin's squadron, also from the Tagus, met at sea by the Arethusa.

Collett *v.* Foster (on the part of the Britannia Life Assurance Office.)—This was an action tending to show the risks incurred by those Life Assurance Offices which refuse to pay medical men for their services, in certifying as to the state of health of persons seeking to insure their lives. For one thus discovered, a hundred, perhaps even a thousand, may escape. We know of an instance where a medical shareholder, acquainted with a candidate's state of health, prevented an assurance for 5000*l.* being accepted. The individual in question was apparently in good health, but died within eight months. It will scarcely be credited, that the shareholder we allude to, was not even thanked for the great service he had rendered the office. In the present case, an assurance was effected on the life of the late Mrs. Collett for 999*l.* in the Britannia Office, on the usual certificates, and disputed after her death, on the ground that she was labouring at the time the assurance was effected, under a mortal disease, the effects of an injury received while ascending Skiddaw. The jury returned a verdict for the defendant; but such a verdict ought not, in equity, to be given, unless it be proved that every inquiry was made prior to the making the assurance, to ascertain the validity of the plea of good health, &c. Life Assurance Societies ought not to be the only corporations able to take advantage of their own *laches*.

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

Sir,—A gentleman who signs himself "A Subscriber," in your last Number, states, that I have not stated my case sufficiently; and from the opinion you gave I believe him to be correct. I will now, with your permission, be a little more explicit. A gentleman possessed of no other qualification than a Membership of the College of Surgeons, commences practice as an apothecary, visiting patients, sending out medicines, &c., in all descriptions of cases. With one of his purely medical cases a consultation is required, and a general practitioner of great experience and talent, a member of Council of the National Institute,' &c, meets him. Now, I ask, Is such a legally qualified general practitioner, one who is especially appointed to guard the interests of his class, justified upon any proper and legal ground in meeting such an individual for the purpose of holding a consultation in a *purely medical case?* Your answer, that the first physician in London would not object to meet Sir B. Brodie, is not to the point, because neither party is an apothecary, but a consulting practitioner merely.

I believe there are numbers of individuals, especially in towns such as Liverpool and Manchester, who are practising as apothecaries, and who imagine they will not be prosecuted because they hold the College diploma; but when it is recollected that the College authorities do not institute any examination in the science and practice of medicine, it is to the public interest that the Apothecaries' Act of 1815 should be carried into full effect. The circumstance of parties seeking the College diploma in preference to the Hall, is, doubtless, in many instances, caused from the easier examination instituted at the former place, and a knowledge of classics not being required. By inserting the above remarks in your next Number, you will much oblige your obedient servant, Justitia.

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A Subscriber, Hull.—Yes.

Dr Griffiths' "Remarks on Calculi" will appear next week.

An Inhabitant of the Strand Union.—The pamphlet of Mr. Painter is no credit to the cause which he advocates. The attempt to blink the real question at issue by personal attacks, shows the weakness of the defence against the Report of the surgeon appointed by the Board of Guardians to inspect the children at Edmonton. That Report, in our judgment, not only remains unanswered, but appears to us to be unanswerable.

[To the Editor of the Medical Times and Gazette.]

Sir,—In reading the report of the discussion on Dr. Wagstaff's paper, at a recent meeting of the Medical Society, in your Journal of February 21, I was much struck with the observations of Dr. Cotton, by which he seemed to imply, that he was wholly and solely indebted to Dr. Horace Green, of New York, for instruction in the use of topical applications to the larynx; he will, however, doubtlessly remember, when I recal the circumstances to his recollection, that, more than two years ago, Dr. Parrott, of Mount-street, called at my house, asking me to show his friend Dr. Cotton the method of treatment I adopted in affections of the larynx. I had much pleasure in doing so; and, after he had seen the sponge introduced into the larynx and trachea of several patients, he expressed his satisfaction. He also examined my spatula—similar to the one figured in my work on Diseases of the Larynx and Trachea—and appeared much pleased with it.

I may also add, that I am glad to learn, through the observations of Dr. Halley at the same meeting, that Mr. Marshall, of University College Hospital, no longer doubts the possibility of passing a probang into the trachea from the mouth. Last year, when Dr. Scott, of Stratton-street, brought him as an able anatomist to witness my practice, they both left my house as sceptical as they entered, although I passed a laryngeal probang into the trachea of several patients in their presence.

I am, &c. John Hastings, M.D.

14, Albemarle-street.

[To the Editor of the Medical Times and Gazette.]

Sir,—Pray can you inform me as to the publications which the Council of the Sydenham Society purpose issuing during the present year? I think many members would be glad to have a little more foreknowledge on the subject, that they might have an opportunity of deciding as to whether it were worth while to continue their subscriptions, without for a moment wishing in any way to dictate as to the works to be selected for publication.

I am, &c. B. C.

A Student, Southampton, will officially obtain the information he desires by addressing a note to the Secretary.

Mr. Gibb will be written to privately.

Cantab.—If your communication has not been surprised *in transitu*,—an occurrence more annoying than uncommon,—it must, if "still upon the road," be keeping high holiday with "Gilpin's hat and wig;" and, if locked in their fond embrace, we may reasonably despair of seeing it before next "boxing" day.

COMMUNICATIONS have been received from—

Mr. C. R. Walsh; Dr. J. W. Reed Mackie, of Cupar, Fife; A Subscriber in Hampshire; Mr. H. G. Wright, Stanhope-street, Hampstead-road; Dr. F. T. Wintle, Resident Medical Superintendent of the Warneford Asylum, near Oxford; An Hospital Surgeon; Dr. W. T. Barker, of Dumfries; Mr. Henry Smith, of Caroline-street, Bedford-square, and Royal Westminster General Infirmary; Dr. Routh, of Dorset-square; Dr. W. Charles Hood, of Colney Hatch; B. L.; Mr. Milton, of Jewin-street; Dr. Edward Smith, of Norfolk-terrace, Westbourne-grove; Verax; Mr. Robert Annan, of Kinross—Compound Fracture of the Cranium in a Boy, with Loss of a Portion of Brain; Dr. Carr, of Rusholme; Mr. Caleb Rose, of Swaffham, Norfolk—On Puerperal Convulsions; Dr. John Hastings, of Albermarle-street; Mr. G. E. Forman, of Teignmouth—Case of Laryngeal and Pulmonary Phthisis; Mr. Gallwey, Surg. R. Regt. of Artillery, Devonport; Dr. Gull, of Guy's Hospital; Dr. Meggison, of Whickham; Mr. T. Redwood, of Montague-street, Russell-square; A Country Subscriber; Devizes; B. L.; A Student.

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CONTENTS;

PREFACE.
INTRODUCTION.
- WEIGHTS AND MEASURES.
  - Weights of the United States and Great Britain.
  - Foreign Weights.
  - Measures.
- SPECIFIC GRAVITY.
- TEMPERATURES FOR CERTAIN PHARMACEUTICAL OPERATIONS.
- HYDROMETRICAL EQUIVALENTS.
- SPECIFIC GRAVITIES OF SOME OF THE PREPARATIONS OF THE PHARMACOPŒIAS.
- RELATION BETWEEN DIFFERENT THERMOMETRICAL SCALES.
- EXPLANATION OF PRINCIPAL ABBREVIATIONS USED IN FORMULÆ.
- VOCABULARY OF WORDS EMPLOYED IN PRESCRIPTIONS.
- OBSERVATIONS ON THE MANAGEMENT OF THE SICK ROOM.
  - Ventilation of the Sick Room.
  - Temperature of the Sick Room.
  - Cleanliness in the Sick Room.
  - Quiet in the Sick Room.
  - Examination and Preservation of the Excretions.
  - Administration of Medicine.
  - Furniture of a Sick Room.
  - Proper use of Utensils for Evacuations.
- DOSES OF MEDICINES.
  - Age.
  - Sex.
  - Temperament.
  - Idiosyncrasy.
  - Habit.
  - State of the System.
  - Time of Day.
  - Intervals between Doses.
- RULES FOR ADMINISTRATION OF MEDICINES.
  - Acids.
  - Antacids.
  - Antilithics and Lithontriptics.
  - Antispasmodics.
  - Anthelmintics.
  - Cathartics.
  - Enemata.
  - Suppositories.
  - Demulcents, or Emollients.
  - Diaphoretics.
  - Diluents.
  - Diuretics.
  - Emetics.
  - Emmenagogues.
  - Epispastics.
  - Errhines.
  - Escharotics.
  - Expectorants.
  - Narcotics.
  - Refrigerants.
  - Sedatives.
  - Sialogogues.
  - Stimulants.
  - Tonics.
- MANAGEMENT OF CONVALESCENCE AND RELAPSES.

DIETETIC PREPARATIONS NOT INCLUDED AMONG THE PREVIOUS PRESCRIPTIONS.
LIST OF INCOMPATIBLES.
POSOLOGICAL TABLE OF THE MOST IMPORTANT MEDICINES.
TABLE OF PHARMACEUTICAL NAMES WHICH DIFFER IN THE UNITED STATES AND BRITISH PHARMACOPŒIAS.
OFFICINAL PREPARATIONS AND DIRECTIONS.
- INTERNAL REMEDIES.
  - Powders.
  - Pills and Boluses.
  - Extracts.
  - Confections, Conserves, Electuaries.
  - Pulps.
  - Syrups.
  - Mellites, or Honeys.
  - Infusions.
  - Decoctions.
  - Tinctures.
  - Wines.
  - Vinegars.
  - Mixtures.
  - Medicated Waters.
  - Distilled, Essential, or Volatile Oils.
  - Fixed Oils and Fats.
  - Alkaloids.
  - Spirits.
  - Troches, or Lozenges.
  - Inhalations.
- EXTERNAL REMEDIES.
  - Baths.
    - Cold Bath.
    - Cool Bath.
    - Temperate Bath.
    - Tepid Bath.
    - Warm Bath.
    - Hot Bath.
    - Shower Bath.
    - Local Baths.
    - Vapour Bath.
    - Warm Air Bath.
    - Douches.
    - Medicated Baths.
    - Affusion.
    - Sponging.
  - Fomentations.
  - Cataplasms, or Poultices.
  - Lotions, Liniments, Embrocations.
  - Vesicatories, or Blisters.
  - Issues.
  - Setons.
  - Ointments.
  - Cerates.
  - Plasters.
  - Fumigations.
- BLOOD-LETTING.
  - General Blood-letting.
    - Venesection.
    - Arteriotomy.
  - Topical Blood-letting.
    - Cupping.
    - Leeching.
    - Scarifications.

POISONS.
INDEX OF DISEASES AND THEIR REMEDIES.
INDEX OF PHARMACEUTICAL AND BOTANICAL NAMES.
GENERAL INDEX.

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[Concluded from page 101.]

ON THE RELATION OF THE INCOME TO THE EXPENDITURE OF THE BODY.

It will be the object of my lecture to-day, gentlemen, to connect together the scattered elements, so to speak, of my former lectures in a general view, by bringing before you especially the relation of the income to the expenditure of the body; that is, the relation of the food to the body and to the excretions. I have shown that the food, or income, consists of four classes of substances; that the flesh and blood contain the same classes of which, you will remember, I spoke so frequently—water, salts, non-nitrogenous organic matter, and nitrogenous organic substances. These four classes exist in all kinds of food and in all kinds of flesh; and flesh and blood I have taken as the representatives of the whole body.

We have seen that the elements in the food go into the body as highly complex compounds in a meroxidic state,—that is, not oxidized to the greatest extent,—while the elements in the excretions come out of the body in much less complex compounds—in a teleoxidic state—in consequence of the action of the inspired oxygen upon them. The substances passing out bear a direct proportion to the substances passing in. However different in mere appearance the principles going out and coming into the body may be, yet there must be a most intimate connexion between that which is going into the body and that which is passing out. I shall perhaps make this evident to you best by taking, as my illustration, a community rather than a single individual.

Let us suppose that a small, inhabited, fertile island is cut off from all external supplies of food, so that the income, that is, the produce, or the food, can only come from the island itself. The population increasing in that island, how can the food be made longest to suffice for the expenditure of the body—for the uses of the inhabitants? This is the problem. If the whole expenditure of the community—if each particle going out of their bodies was returned to the ground, and if the bodies themselves, after death, were returned to the dust, then every particle of the food would be restored to the soil from which it came. The elements might again and again go through the same course, or cycle; thus life might be prolonged, and the population might increase, and it would increase until some one or more elements for forming the food were wanting, and could not be procured. When some one element ceased to be present in the soil, the food would cease to be produced, and the increase of the population would stop; but if the whole expenditure, and the substances of which the bodies themselves consist were returned to the ground, the population might be kept up, as far as the substances which enter into the structures of the body are concerned, at the above-mentioned point for an indefinite time, and the population of the island might remain fixed and flourish at that amount, the expenditure and the income being exactly balanced. But if in such an island, instead of this care being taken of the substances passing out of the body, and of the constituents of the body themselves, if every means were taken to allow the expenditure to be lost, to drain it off, and carry it away from the island with the greatest care, the more rapidly it was drained off, the quicker would the island be exhausted, and be unable to furnish fresh income for the supply of the bodies of the inhabitants; exhaustion and starvation would follow as surely as bankruptcy and ruin result in the cases of thoughtless extravagance which we read of in the Bankruptcy Court. If a course of reckless waste and extravagant expenditure is entered on, there is but one way of avoiding the ultimate result,—that one way consists in putting as much into the pocket, or into the island, as is taken out of it. Hence the necessity of the importation of food, of guano, of bones, and mineral manures. The quantity that goes in, deducting always the increased weight of the population, gives the exact measure of the quantity that is thrown away; the income going in is on the surface, and is seen; the expenditure is in the deep, and is lost. The stream of corn and guano which arrives at our ports represents the under-current which is lost in the sea, always deducting the increased weight of the inhabitants of the island. Instead of thus leaving the elements of the corn and guano to nourish the sea-weeds, that support the fishes, that feed the sea-birds, that produce the guano, how far more economical, how much surer and more rapid a return would be obtained by stopping the drain that passes into the sea. So in individuals: there must be a balance between the income and expenditure of the body; otherwise disease, increased growth, increased fulness, fatness, and plethora, or the opposite to these, must ensue.

If beefsteaks—that is, the muscles of an ox—are given to one who has taken strong exercise, and is in perfect health, this animal food, as I have shown, is dissolved, and passes into the blood, and is there used to supply the muscles of the man. The object for which food is eaten is not for the purpose of forming uric acid and urea, and the constituents of the urine. The muscle of the ox and the muscle of the man consist of the same four classes of substances. The muscle of the man, by exercise and by the action of oxygen, gives rise, as you saw, in all probability, to kreatin, kreatinine, uric acid, urea, and to the sulphates, phosphates, carbonic acid, and water. These substances are produced by the action of the oxygen upon the constituents of the muscle. The greater part of the waste passes off by the kidneys, the carbonic acid and water passing off by the lungs. These organs, the lungs and the kidneys, were not made to secrete urine and to throw off carbonic acid for the purpose of supplying vegetables; but they were made to separate useless or hurtful substances from the body.

The simplest view, then, which I take of any organ which is used, and must be repaired, is this:—The substance of the organ, by being used, becomes capable of being removed, and must be actually removed from the body. The waste of the organ or of the muscle passes off in the urine, while the food, or the income, is going in, and is used for the supply of the wasting body. Such I consider to be the very simplest view which can be given of the relation of the urine and the products of respiration to the system; and, theoretically, it seems to be the only true healthy relation; and, perhaps, in a state of full bodily labour, when enough food, and no more, is taken, this may be the only relation existing between the organs of the body, or the muscles, and the excretions. But in the body provision has been made for too hard labour and for too much food. If too much food is constantly taken, and too little exercise, there must come an over fulness of the blood, and hæmorrhage, unless some safety-valve for the excess had been provided. I have shown you in these lectures that the earthy phosphates, the sulphates, and the urates, are generally increased in the urine after food has been taken. If more food is eaten than is required for the wants of the system, there can be no doubt that the excess of food is thrown out by precisely the same organs that remove the waste of the muscles and the other structures. If even an excess of water is taken into the system, that excess is thrown out of the system without being used in the body at all, according to exosmotic laws which have not yet been clearly applied. We do not fully know the circumstances determining the removal of an excess of water, still less of other substances, from the body. As far as I can understand the question, it only adds to the difficulty to say that the unvitalised portion of the food or water is thrown out, and that the vitalised portion remains for the purposes of life. Why uric acid, for instance, is formed directly from the food seems a question more likely to be solved by keeping it distinct from the question of vitalization.

Long ago Dr. Prout fully recognised that food not only nourishes the body, but, when an excess is taken, passes out partly in the urine. That this double relation of the urine to the food and to the structures exists, I have attempted to show you in these lectures. The facts, then, though we cannot explain them fully, are,—that the food makes blood; that blood makes the muscle and tissues; that these, when used, return in a different form into the blood, and again pass out by the breath and the urine. But this, as I have said, is not the only relation of the food to the system; there is a shorter relation. Some

portion of the food, if an excess is taken, and too little use of the system is made, goes into the blood, is not used for the purposes of the system at all, but passes out directly into the urine, when it nourishes vegetables, is raised again to a high state of complexity, and can again serve the purposes of animal life. This double relation, without doubt, exists; and though I cannot tell by what means the quantity thrown out, when an excess is taken, is determined, yet it is easy to see what is gained by preventing the system from being overloaded with nutriment; useless matters are thus removed and saved from accumulating in the system, where they would rapidly produce illness, if not death. The first relation is that which I take to be the most healthy one; that in which the quantity of food is just proportionate to the wants of the system, and in which the substances thrown out are solely those which have been used in the system. The second relation I conceive to be only a relation of safety, not existing in the state of most perfect health.

As regards the expenditure, provided the actual quantity thrown out is proportionate to the quantity which is used in the system, it matters but little in what form the expenditure takes place. It makes no difference whether the expenditure of our money is in pounds, shillings, or pence, provided the same sum is spent; so, in this point of view, it is of little importance whether the substances pass out as uric acid, or urea, or carbonic acid, ammonia, and water, so that they are got rid of; the amount of the ultimate elements may be the same, notwithstanding very different substances may appear in the secretions from time to time.

One great cause of the variation in the forms of the substances passing out of the body is the difference in the action of the oxygen which is inspired, that is, whether the action be little or excessive. In the three lectures on respiration, I dwelt at such length on this action of oxygen on the food and tissues, that I have but little to bring before you here; but I may state this,—that, if the discovery of the circulation of the blood is still considered to exercise the greatest influence on physiology and pathology,—if the establishment of this fact is thought to have added more to our knowledge than any other single fact previously known in medical science,—if this circulation of the blood be considered as the one grand vital action,—I am sure that the grand chemical principle, the action of oxygen in the body, may be regarded as of equal importance. The action of the circulation and the action of oxygen cannot be compared; indeed, they admit of no separation: they are related, and there is even an intimate dependence on each other: they cannot even take place separately; the muscle could not contract without the chemical action, probably, of the oxygen; and the oxygen would not re-act on the muscle without the contractile action of other muscles assisting in drawing in the oxygen, and circulating it in the blood. There is no spot in the body to which this oxygen does not reach; in the capillaries, in the minute textures of various organs, the oxygen exercises its power of combining with hydrogen, with carbon, and even (as I have already shown you) with inorganic substances, oxidizing these to the greatest degree, oxidizing the hydrogen to form water, and the carbon to form carbonic acid. This action of oxygen it has been the great object of these lectures to bring before you. Still, there are one or two other instances of the action of oxygen which I may be permitted to dwell upon here.

One, and a very beautiful one, as illustrating the action of oxygen on the excretions, is the peculiar colour which the urine possesses. Some of the various forms and hues of the deposits which it presents I have already shown you. Generally we might say, that yellow, brown, pink, and green, are the colours which, in every shade and in every mixture, can be met with in the urine, in health or in disease. If I were to ask where else you could find these colours in every variety mixed in nature, you would probably answer, in the changing leaves of autumn. The pale yellow of the poplar, the bright yellow of the ash, the brown of the oak, the pink of the climatis, the most varying shades of autumnal tints, can be matched by the urine in health and disease. But there is a much more wonderful relation than these mere variations of colour. The colouring matter of the bile, I have already mentioned to you, has been found to be identical with the chlorophyl, or colouring matter of leaves; and as the various modifications of the chlorphyl in autumn, by long exposure to the air, undergo various changes in colour, so, probably, that portion of the colouring matter of the bile which is absorbed undergoes various changes by the action of the inspired oxygen, and gives rise to the different colours which the urine possesses. Thus, even to the eye, the colouring of the urine bears evidence of that action of oxygen which is going on in the body. Perhaps the most beautiful and striking colour which the urine ever possesses, is the pink hue which you see here on this filter, on which is collected the sediment of the urine from a patient who has an inflammation in the neighbourhood of the liver, so that that organ is not able to perform its proper functions.

You might think, and it has been so stated, that this colouring matter bears a relation to the colouring matter produced by the oxidation of uric acid; but I think a moment's experiment will serve to convince you that such is not the fact. It is, in my judgment, the result of a want of oxidation of the colouring matter of the bile rather than the result of any change in the uric acid. I have here a uric acid solution, coloured by purpurate of ammonia, as it was called by Dr. Prout, or murexid, as it is termed by Professor Liebig. Let me contrast this with the substance on the filter, which is not coloured with purpurate of ammonia, as I can show you. If I add to the solution of purpurate of ammonia a little potash, you will see that a most marked change ensues. Instead of remaining of a pink colour, it becomes of a beautiful purple—a very distinct and diagnostic re-action. (Experiment.) This same colour would be produced if I added the potash to pure murexid, which I have here dissolved. If, however, I let the potash fall upon the sediment on the filter, the re-action will be very different,—we shall have a green colouring matter, precisely similar in appearance to that of the bile, and no purple colour at all. That this red colour is closely related to the colouring matter of the bile, I think probable, because, even in the bile itself, occasionally, a remarkable red colouring matter results from changes which take place within. Here is some bright red-coloured matter, consisting of altered bile, which I removed from the liver of a patient in St. George's Hospital. Thus even the very colouring matter of the urine may be an index of the oxidation which is taking place in the body.

Let me mention one more illustration of the action of oxygen, not only to show its action in health, but also to remind you of its purifying action in disease. I have already spoken in these lectures of urea, which is one form in which the expenditure of the nitrogenous substances of the body is thrown off. I have here a solution of urea in alcohol; and if I burn the alcohol or oxidise it, what would happen? You know the result of the oxidation of alcohol alone—carbonic acid and water are formed.

Oxidation of Alcohol and Urea.

Alcohol + Oxygen = Carbonic acid + water

$$C_4\ H_6\ O_2 + O_{12} = C_4\ O_8 + H_6\ O_6$$

Urea + Oxygen = Carbonic acid + Water + Nitrous acid

$$C_2\ N_2\ H_4\ O_2 + O_{12} = C_2\ O_4 + H_4\ O_4 + N_2\ O_6$$

But, if I burn this alcohol that contains a little urea in solution, what would happen? Let me take a watch-glass, and pour into it a little of this solution of urea in alcohol. I will burn this, and show you the products of the oxidation of the urea as well as the alcohol. I shall find, if the combustion takes place as I wish, that the urea combines with the oxygen, and that we have not only carbonic acid and water produced, but an oxide of nitrogen—nitrous acid, resulting from a combination of the oxygen with the urea. You remember my test for nitrous acid. I have here some starch, iodide of potassium, and a little dilute hydrochloric acid, with which I moisten the sides of this glass, and hold it over the solution which is burning in the watch-glass. See how rapidly there is manifest evidence of nitrous acid being formed by the beautiful blue iodide of starch that is produced. (Experiment.) If I take this urea into the body by swallowing it, it is oxidised in the same way as it is out of the body. You will remember what I stated regarding the salts of ammonia. Urine passed after muriate of ammonia was taken, I showed you, contained manifest traces of nitrous acid: so, also, precisely the same thing can be proved to occur when forty grains of urea are taken; the urea is oxidised in the body just as it is when burnt out of the body. If urea or muriate of ammonia or other substances accumulate in the body, they will probably be oxidised there, as I have shown; even alcohol, when taken in large quantities, is a poison, and its removal from the body

depends upon the intense action of the oxygen which is inspired.

In the healthy state, then, the four classes of substances of which our tissues and bodies are composed pass out of the body thus: 1st, the water passes out in respiration, by the perspiration, and by the urine; it passes out as vapour and as liquid. 2ndly, the salts, or the mineral matters, oxidized, as I mentioned, to the greatest degree, pass out also chiefly by the urine. 3rdly, the non-nitrogenous organic substances of which I have spoken, including the fatty matter which circulates through the system, also are oxidized in the body, and pass out in health in the form either of carbonic acid and water only, or pass out as acetates, lactates, or even possibly as oxalates, in the urine. In states of disease these non-nitrogenous organic substances pass out of the system as sugar. 4thly, the nitrogenous organic substances are expended in the urine as uric acid, kreatin, urea, or in another form of urea, namely, carbonate of ammonia. In disease, the albumen itself, as I showed you, is occasionally drained away.

The specific gravity and quantity, in twenty-four hours, of the urine thrown out of the body may thus be taken to represent, for the most part, three out of the four grand classes of substances excreted from the body: these are, 1st, water; 2ndly, the salts; and 3rdly, the nitrogenous organic substances; while the non-nitrogenous organic matter is, for the most part, thrown out by the lungs. As regards three of these classes, then, the quantity of the urine may be taken to represent the expenditure of the body, provided the amount of the substances held in solution in that water is determined. The specific gravity of the urine does not accurately represent the quantity of the substances passing out in solution; the specific gravity cannot be taken as a true and perfect index of the quantity of substances that are held in solution. If I take equal quantities of the same substances dissolved in precisely the same quantities of water, I shall find the specific gravity of the solutions may be very different.

The following table shows, that in 1000 grammes of water at 60°, 40·3 grammes of urea gave 1010·4 specific gravity; but the same quantity of common salt gave 1024·1. The same quantity of sulphate of potash gave 1029·7.

Relation of Specific Gravity to Solid Residue.

In 1000 grammes of Water at 60°		Specific gravity.
40·3 grammes Urea	gave	1010·4
20·1 ,,	,,	1005·3
10·0 ,,	,,	1001·6
40·3 grammes Common Salt	,,	1024·1
20·0 ,,	,,	1011·9
10·0 ,,	,,	1006·0
40·3 grammes Sulphate Potash	,,	1029·7
20·0 ,,	,,	1014·0
10·0 ,,	,,	1007·1

So 20 grammes of each substance dissolved in the same quantity of pure distilled water, gave different results as to their specific gravity; this being, as you see, in the instance of urea 1005·3, and in the instance of salt 1011·9, and of sulphate of potash 1014. By taking only 10 grammes similar results were obtained, and so with intermediate numbers also. I find, also, that if you take the urine at different times of the day, and examine its specific gravity, you may find that it has precisely the same specific gravity, and yet the quantity of solid substances dissolved in it may be very different. This is shown in the following table:—

Relation of Specific Gravity to Solid Residue per 1000 *grains of Urine.*

	Specific gravity.	Solid residue.
Urine passed before dinner	1028	67·0 grains per 1000.
,, after ,,	1028	66·6 ,,
,, before ,,	1028	64·8 ,,
,, after ,,	1034	84·6 ,,
,, before ,,	1025	60·8 ,,
,, after ,,	1025	64·6 ,,
,, before ,,	1025	56·7 ,,

The different quantities of solid matter in the same quantity of urine of the same specific gravity are explained by there being different quantities of urea or of salts in solution. The salts add more to the specific gravity than the urea does.

The way of determining the quantity of solid matter is to take a weighed quantity of urine, and evaporate it in a water-bath to prevent the destruction of the urea, which is a substance easily decomposed. Before it comes to perfect dryness it is put into the vacuum of an air-pump over sulphuric acid, which takes away the residue of water, and it must be weighed until no further loss ensues. If you evaporate over the water-bath alone you can never bring it to perfect dryness; it is always necessary to place it *in vacuo* over sulphuric acid. The specific gravity alone may give you a rough conjecture as to the amount of solid matter in solution; and there are various methods by which the specific gravity can be ascertained. These graduated instruments may be used for this purpose; or, still better, for small quantities, these little glass beads can be used. The specific gravity of the solutions is determined by seeing whether the beads will sink or float. Numbers are marked on the different beads, so that the specific gravity of a very small quantity of urine can be ascertained, but far more accurately by the 1000-grain bottle and a good balance. You will find tables given in books which profess to tell you the solid residue of urine of all specific gravities. However, it is impossible to arrive at the amount of solid substances by any of the tables which have been published for this purpose. Careful evaporation alone, in every case, can give you accurate results.

If we could accurately determine the quantity thrown out by the lungs, skin, and kidneys; and if, at the same time, we could determine the quantity of food which is taken in, we should arrive at the fact of the gain or loss of the body. This knowledge is obtained far easier and more simply by weighing the body itself. We thus arrive at the loss or gain much more readily than by deducting the expenditure from the income. When the fact of a loss or a gain is determined, there are two possible ways to account for it. 1st. If the body lose, too little food has been taken in, or too much has been given out. In starvation, for instance, life may be prolonged either by giving food or by taking the least possible exercise,—by causing the least possible quantity of substance to be removed from the body. In diabetes, if you stop what is passing out, to a certain extent you check the progress of the disease; and the same result is obtained by giving an excess of oleaginous food. 2ndly. If the body is gaining instead of losing, too much must come in, or too little must go out. In excessive fulness, or in gout, less food must be eaten, or more exercise must be taken, or, by active medicines, the excess which has accumulated must be removed. Thus, here as elsewhere, Nature has more than one way by which her object can be attained. She must be assisted in her work, not so much by compulsion and violence, as by watching the indications she presents,—that is, by following the suggestions she offers. Thus the physician can be the means of restoring that balance between the income and the expenditure, without which we cannot long go on.

If in these lectures I have been enabled to show you the value of animal chemistry,—if I have convinced you of the importance of the knowledge already obtained, and of the far greater value of that which has to be acquired,—if I have satisfied you that chemical actions are taking place in the body, and, more especially, that the action of oxygen never ceases therein,—and if I should thus lead you to see that the vital force is no separate, distinct, and individual force, but that it is a collective term including many distinct though, very probably, closely related forces—as, for instance, the nervous force, the contractile force, the chemical forces, and the formative forces,—I shall not, I hope, have occupied your time and attention (for which I am indebted to you) in vain.

Life. — The Conjoint Action of many Separate Forces in the Body.

Mental forces			Animal forces.
Sensation			
Contraction			
Cell forming		Vegetable forces.	
Cell modifying			
Chemical forces	Inorganic forces.		
Gravitation			

Finally, I have as far as possible endeavoured to base these lectures on experiment, because in chemistry no other authority than that of experiment can with safety for one moment be trusted. In animal chemistry more perfect and more extended experiments are wanted to enable us to arrive at clearer and more connected ideas; and let us never forget, that no medical opinion, no chemical authority, ought to be allowed the slightest weight in opposition to experimental truth.

ORIGINAL COMMUNICATIONS.

IRITIS IN AN INFANT.

By ROBERT TAYLOR, M.D.

Physician to the Central London Ophthalmic Hospital.

Thomas Wright, aged 9 months, a remarkably robust and healthy-looking infant, was brought to the Central London Ophthalmic Hospital, Nov. 13, 1851, on account of disease of the right eye.

Ten days ago, his nurse observed a small whitish speck on the right iris; this gradually increased in size, and assumed a yellowish colour; but, as the child did not seem to suffer pain or inconvenience, she did not apply for medical advice till this morning, when her alarm was excited by the altered appearance of the eye.

On examination, I found the aqueous humour so deeply tinged with blood, that the deeper-seated textures could not be discerned; but, on concentrating the light by means of a large lens, one or two yellowish specks were visible towards the outer part of the anterior chamber. There was slight conjunctival and zonular sclerotic redness, but, after a careful examination, as well by my colleague Mr. Walton as by myself, no trace of external injury could be detected. I was well assured by the nurse, that, though brought up by hand, he had never had a day's illness, and that he had never had a cutaneous eruption of any description. The healthy appearance of the child was such as to confirm the truth of her assertion. The two lower central incisors pierced the gums several weeks ago; there is a profuse flow of saliva, and the child carries everything to his mouth; but the gums are cool, and free from swelling or unnatural redness.

Hydrarg. c. creta, gr. j., nocte et mane. Lotio belladonnæ.

17th.—The blood has been completely absorbed, and the interior of the eye can be clearly seen. The outer half of the iris is covered by a thick mass of rusty-yellow coloured lymph, dotted in one or two points with red; this projects so far, as to be almost in contact with the cornea, but causes very little distortion of the pupil, which is of moderate size, and slightly adherent to the capsule of the lens by two points immediately under the effusion. The inner half of the iris is of a bright green colour, that of the other eye being blue. There is no intolerance of light, and, apparently, not the slightest pain during the day; towards night, he occasionally rubs the eye, and becomes rather restless; but it appears doubtful whether this is to be attributed to uneasiness in the eye or in the mouth. In other respects he is in perfect health.

Hydrarg. c. creta, gr. j., omni nocte.

24th.—The effusion is diminished to one half its former size; the adhesions are no longer visible; the pupil is about two-thirds dilated; and the iris is resuming its natural colour.

Pergat.

Dec. 3.—Through the stupidity of the nurse, the treatment has been altogether suspended during the last week. She asserts that the effusion had been diminished to the size of a pin's head, and that last night the eye was perfectly clear; this morning, however, the aqueous humour is again deeply discoloured with blood; fresh lymph has been effused on the surface of the iris, the cornea is dull and clouded, and there is considerable zonular injection of the sclerotic. Still there is no intolerance of light, nor pain in the eye during the day; but, as the child frequently becomes restless towards night, and is constantly thrusting his fingers into his mouth, I have thought it prudent to use the gum-lancet freely, though the mouth is cool, and there is no superficial swelling of the gums.

Hydrarg. c. creta, gr. j., nocte et mane. Contin. lotio belladonnæ.

8th.—The blood has again been absorbed, and the cornea is clear. The effused lymph covers about three-fourths of the outer half of the iris; it is dotted with red points, and projects so as to be almost in contact with the cornea.

Hydrarg. c. creta, gr. j.; omni nocte. Lotio belladonnæ.

Jan. 3, 1852.—Through carelessness, the treatment has been very irregularly carried on since the last report. There is still a spot of lymph about the size of a pin's head, and the iris has not quite recovered its natural colour. As the gums were slightly swollen, I again used the lancet freely.

The child was not again brought to the hospital; but, after a good deal of trouble, I succeeded in finding the address, and saw him a few days ago. There is still a small yellow spot on the outer side of the iris, but it does not project above the surface, and might readily be mistaken for a stain, such as is often seen on grey irides. The iris is rather darker in colour than the other, and its structure not quite so distinct. Vision does not seem to be seriously impaired; but the early age of the child renders it impossible to test minutely the comparative powers of the eyes. One of the upper central incisors pierced the gum a few days ago; the other is just about to protrude.

I have detailed this case at some length, as I think it illustrates an effect of dentition which has not hitherto been described, and to which it may be desirable to attract the attention of those who have an opportunity of witnessing the diseases of infancy on a large scale. Idiopathic iritis, though occasionally seen in scrofulous children of three or four years of age, is of very rare occurrence in infancy; and in the few cases in which it has been observed, it has been in connexion with congenital syphilis, and consecutive to disease of the mucous or cutaneous surface. In this instance, however, the history of the case and the appearance of the child render it evident that no venereal taint existed. Congenital syphilis usually makes its first appearance a few weeks after birth,—in the large majority of cases between the first and third month; and M. Trousseau, who has had opportunities of witnessing the disease on a large scale, and upon whose authority I make these statements, has seen one case only in which it has been delayed so late as the seventh month. It makes its first attacks upon the cutaneous and mucous tissues, and if not speedily eradicated from the system produces a cachectic state of the constitution, a withered and senile appearance, and a pallid and dingy hue of the skin, which are eminently characteristic of the disease. In this instance, none of these symptoms were present. The child had never had a day's illness, but, on the contrary, presented a robust and healthy aspect, such as is rarely seen in children brought up by hand, especially in the impure air of the Metropolis. Still, local disease of such unusual extent and violence could not have arisen without some adequate exciting cause; and, in the absence of any constitutional defect, I think this may be ascribed to the irritation to which the dental nerves were subjected by the rapid process of development in connexion with their extremities; for, though the teeth had not as yet approached the surface of the gums, it was evident that dentition was in rapid progress at the base of the alveolar processes. We see the effects of irritation applied to these nerves in the adult, in the occasional occurrence of amaurosis from the presence of a carious tooth; perhaps many of the cases of amaurosis which have hitherto been considered as congenital have arisen during infancy from a similar cause; but, at all events, the occurrence of strabismus during dentition is familiar to all. The consideration of these well-established facts prepares us the more readily to admit that the iris, which, by means of the ciliary nerves, is in such intimate connexion with the dental branches of the fifth pair, may also be subject to the same injurious influence, and be liable to have the process of its nutrition so far deranged as to produce inflammation, as occurred in the case under consideration. Such an explanation appears more credible than the supposition that a child of such healthy appearance should have been for nine months tainted with the venereal poison, without exhibiting what has been hitherto considered the inevitable result, viz., disease of the mucous and cutaneous tissues, and syphilitic cachexia. In the absence of sufficient data, it is impossible to arrive at any positive conclusion on the subject; it is therefore to be hoped, that those who have the opportunity will investigate thoroughly the effects of dentition in producing disease of the eye. As hitherto, iritis may be rarely observed, but it is not improbable that amaurosis may in many instances be detected at its commencement, and vision preserved in many cases by timely treatment, in which, otherwise, it would be irretrievably lost.

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REPORTS OF PRACTICE

ILLUSTRATIVE OF THE

DIAGNOSIS, TREATMENT, AND PATHOLOGY OF OVARIAN TUMOURS.

By FREDERIC BIRD, M.D.

Lecturer on Midwifery and the Diseases of Women at Westminster Hospital.

(Continued from page 123, Vol. III., New Series.)

It has been already shown, that comparative freedom from symptoms is very often observed in cases of ovarian tumour, and that, perhaps, in all uncomplicated examples, unless the rapidity of the diseased growth has been remarkable, there occurs a variable period during which the only evident sign of such disease is the abdominal enlargement to which it gives rise, and thus the assistance to diagnosis afforded by symptoms is often negative rather than positive; and, as in an instance previously adduced (*Case* 10), rapid destruction of health co-existing with a simple, uncomplicated, and painless tumour of the ovary, was traced to another and more important cause, so, in others, it has been found that severe general suffering often served to disprove the ovarian character of the abdominal distension; or, if ovarian tumour was really present, to indicate its association with other and unallied disease.

Case 12.—I was called into the country to visit a lady, aged 52, under the care of Mr. Savery, of Wendover. For several years the patient had suffered from abdominal enlargement, which, during the preceding twelve months, had greatly increased. For a time, her general health had suffered little impairment; but subsequently, her constitutional powers had rapidly failed, and it had become difficult for her to move without assistance. Her symptoms were the following:—Abdominal intumescence to nearly the size of a completed pregnancy; fluctuation in several parts evident, but interrupted in others by masses of hard structure, which could be distinctly felt. Internal examination detected a healthy uterus, and the basic or inferior portion of an ovarian tumour lying, but not impacted, in the pelvic cavity. There was considerable emaciation; the lower extremities œdematous; the respiration hurried and irregular, with occasional attacks of dyspnœa; the pulse feeble and frequent; slight but frequent cough, with simple mucous sputa. The patient had already been visited by Mr. R. Ceely, of Aylesbury, and his accurate diagnosis left little to discover. That the case was one of ovarian tumour was certain, and that life was speedily approaching its termination was equally so. The mobility of the tumour rendered its removal by excision probable, and the only question was, whether or not the symptoms observed were wholly dependent upon the presence of the diseased growth. Examined by the rule I have alluded to, it was evident that the tumour was not of sufficiently large size, nor had been so rapidly developed, as to excite the urgent symptoms present, and that it was probable some other disease existed. The chest was then auscultated, and a distinct diastolic murmur over the region of the bicuspid valve was detected. Palliative measures could alone be suggested, and, in a few weeks, the patient had ceased to live.

It is only in the concluding stages of ovarian tumour, when, from extreme distension of the abdomen, the capacity of the chest has suffered diminution, that dyspnœa and all its kindred symptoms ensue; for then the upward pressure of the fundus of the cyst displacing and carrying upwards the stomach and transverse colon, which, flatulently full, contribute to the impediment, embarrasses the respiratory organs, and gives rise to symptoms otherwise indicative of thoracic lesion.

The same rule applies to those instances in which an anasarcous state of the inferior extremities is observed. If it be found that the tumour of the ovary is not of very large size, or, if small, has not by peritoneal adhesion or otherwise become so impacted in the pelvis as to mechanically retard the refluent blood in its course through that cavity, a suspicion of other disease co-existing may be justly entertained.

Case 13.—J. H., married but sterile, aged 43, was sent to me by Dr. Babington. Eight years ago she was subjected to certain local violence, involving the generative system, apparently producing inflammation within the pelvis, on the subsidence of which profuse menorrhagia occurred. For the last year and a half the abdomen has become much enlarged, and, within the last six months, the intumescence has increased rapidly, and she now presents all the ordinary signs of ovarian tumour, containing fluid, and equalling the dimensions of the uterus in the seventh month of gestation. Since the occurrence of abdominal swelling, menstruation has been healthy, and with the exception of occasional, but slight pain about the pelvic and lumbar regions, she has suffered nothing. By vaginal examination, the pelvic cavity was found free from visceral impaction, and the uterus healthy. The legs were œdematous, and had been so for several weeks. No evidence of impeded circulation, either in the pelvis or the thorax, could be discovered, nor was the general system so enfeebled as to cause anæmic effusion. Although it was difficult at first to explain the cause of the œdema, it was at least certain that the effusion was not consequent upon the ovarian tumour. The urine was then examined, but the test of heat gave no opacity or other evidence of renal disease; but a few days afterwards, when nitric acid was employed, traces of albumen were detected. The absence of albumen in a free state had occasioned the error, and within one month general dropsy ensued, and the patient died in the Westminster Hospital, from serous inflammation.

The examples hitherto narrated serve to illustrate the variations that may be presented both in the general and local signs, as well as their occasional modification by certain complications arising in the course of ovarian tumour. Symptoms may be nearly altogether wanting, or from the commencement to the end may be acute and urgent; between these two extremes many gradations exist, and it is probable that every instance will furnish some points of dissimilitude to others. Any attempt at useful generalisation is thus opposed, and it is difficult to arrive at any deductions from symptoms that may be successfully applied to diagnosis, leaving it at last to be directed almost exclusively by the physical signs.

DIAGNOSIS.

In now passing to the question of diagnosis, which forms the first of the three subjects to the illustration of which these clinical notes are intended to refer, it is necessary to premise, that neither the examples nor the remarks founded upon them apply to the incipient stages of ovarian tumour, but have more especial relation to those later periods of its course in which evident enlargement of the abdomen has occurred, and in which state the question of the treatment by extirpation may arise for consideration. To facilitate the arrangement of cases, if for no more important purpose, it will be useful to regard the subject of diagnosis as divisible into two forms, which, in the absence of more appropriate terms, may be designated as "differential" and "special;" classing under the former those evidences by which ovarian tumour may be distinguished from other diseases characterised by abdominal intumescence; and, under the latter, those particular signs which may, in the course of medical treatment, favour or forbid the employment of the knife.

Differential Diagnosis.—It has been already shown, that ovarian tumours may, for a time, evince but few symptoms, or, under certain conditions, may be early attended by acute suffering; and, if the previous history be noted, it will be found that this diversity in symptoms admits of frequent explanation, by reference to the comparative rate at which the morbid development may have proceeded. Ovarian tumours of rapid growth soon indicate their presence by urgent symptoms and concomitant destruction of general health, while, in those of slow formation, the burden of disease is so imperceptibly increased, as scarcely to be felt until sufficiently great to act as a mechanical cause for suffering. Beyond a knowledge of the duration of the disease, the previous history of ovarian tumour usually affords but little aid to diagnosis; nevertheless, it may often be elicited, that inflammatory action, or congestion involving the ovarium, had occurred at an early period, although the fact, even when obtained, does little more than suggest a probable cause for subsequent tumour, and, in very many cases, no such antecedent symptoms may have occurred, or have attracted attention.

The unilateral position of the diseased ovarium has already been adverted to as indicative rather of a complication of the disease than as diagnostic of its character. In the great proportion of instances, the tumour will be found from the earliest period of its detection to have been centrally placed, and, in the more advanced period of the disease, when abdo-

minal distension has become considerable, I do not think I have ever observed unilateral position of the tumour, even in a slight degree, unless previous peritonæal inflammation had effected adhesion, by which the morbid growth was prevented from falling into that position in the abdomen in which it would otherwise have occupied; recording an exception, however, in those cases in which a more or less solid tumour is at its inferior portion impacted in such a manner in the pelvis as to prevent the upper or abdominal part from occupying a central direction. Of the one hundred cases taken to illustrate these remarks, and to which reference has been already made, it was found that the tumour had preserved a central position in sixty-eight examples; in fourteen no sufficiently accurate statement could be obtained, and in the residual eighteen the tumour was unilateral. Of these eighteen cases, it was subsequently proved, in the course of treatment or autopsy, that peritoneal adhesions were present.

Inquiries into the hereditary tendencies to disease will discover in a large number of cases the circumstance of certain members of their family having died from phthisis, and the strumous diathesis will probably be remarked in the sufferers themselves; but there are also many instances in which no such fact can be noted. So is it with reference to age and social position; uncertainty applies to both, and in the search for any peculiar features by which ovarian tumour may be recognised, nothing is discovered in the general symptoms or condition by which its existence can be rendered more than probable. All that at present can be derived from the analysis of cases seems to be the following:—

(*a*) Ovarian tumour is most frequently found in those of strumous diathesis, and phthisis very commonly exists in the collateral branches of the family, and sometimes in the patient herself.

(*b*) Ovarian tumour is more frequent between the ages of 25 and 35 than at any other period of life.

(*c*) Ovarian tumour is more common in those who have been married, than in the unmarried.

(*d*) Ovarian tumour is commonly associated with sterility.

(*e*) Ovarian tumour does not necessarily give rise to any symptoms beyond abdominal distension, until very large size has been attained, unless the development and rate of increase has been very rapid, or peritoneal adhesion or pelvic impaction has caused mechanical pressure upon adjacent structures.

Useful as the preceding facts may sometimes be, it is yet obvious that they are wholly insufficient in themselves to conduct to a correct opinion, and the diagnosis has still to be supported by more certain data.

Ovarian tumour, whether formed of one principal cyst, constituting what is not very correctly called the unilocular species, or of many cysts, as in the multilocular type, may vary greatly in size and somewhat in shape, but is usually referrible to the same figure,—the ovoid, having the fundus more spheroidal, the base more pyriform, or at least forming an arc of a lesser circle than that described by the former,—the outline is generally regular, unless solid matter, or masses of condensed secondary cysts growing internally from the walls of the primal sac project outwards and produce a nodulose form; but, however large the hard portions of a tumour may be, if fluid be also contained within, they seldom cause irregular prominence, and often cannot be felt until after the cystic secretion has been removed by the trocar, when the original figure of the tumour becomes lost. Shape, then, becomes one element in the diagnostic examination, and, as will be hereafter shown, is often of much value.

A certain relative position is also possessed by tumours of the ovary, which they very rarely lose. Unless complicated with peritoneal adhesions, by which the tumour may be fixed unilaterally, that position is central with regard to the lateral regions of the abdomen. The tumour generally rests more or less upon the pelvic brim, and is placed anteriorly to every viscus in the abdomen, with the exception of the bladder, which is lodged in a somewhat triangular space above the symphysis pubis formed by the divergence of the lesser curve of the tumour as it rests upon and is supported by the greater curve formed by the outstretched recti abdominis muscles. The space thus left is often very small, and but little room is permitted for the expansion of the bladder under urinary accumulation, and hence the common symptom of frequent micturition. The relative positions of the ovarium in health and in disease thus become changed; in the former state lying inferiorily and posteriorly to the uterine fundus, and in the latter enlarged by the tumour rising above it, and soon passing forward, leaves the uterus to occupy an inferior and posterior situation. But although, from greatly increased size, the ovarium ultimately becomes anterior to the uterus, yet is the position of the latter organ often otherwise altered—a circumstance dependent upon the variable space interposed between itself and the base of the morbid growth, constituting what is termed a long or a short pedicle; and it will be hereafter shown, that the altered position and direction of the uterus may afford important aid in determining the comparative safety or danger of extirpation. Occupying a relatively anterior position, no alteration in the condition of the other abdominal organs seems to affect that of the enlarged ovarium, and in those examples in which pregnancy supervenes upon ovarian tumour, the uterus still remains behind it, even until the full completion of gestation. On this almost unvarying position of the tumour depends the diagnostic importance of percussion, which ranks as one of the most valuable means brought to the investigation of ovarian disease.

Unless early peritonitis has occurred, which, by its consequent adhesions has bound down and united the small intestines either to the tumour or to each other, they are gradually carried upwards by the increasing size of the diseased growth, and supported by its fundus, and at last compressed into the hypochondrial regions, there to remain (often performing their functions in a very diminished space) until the removal of the fluid portion of the tumour, or its complete excision, allows them to regain their former and natural position. Frequently their long previous compression prevents them from quickly doing so, and several days often elapse before they escape from the small hypochondrial spaces in which they had become placed, and sometimes not until purgative action has stimulated them to augmented movement; then they descend, and for a time give rise to more inconvenience than when previously displaced. The transverse portion of the colon also, which, when the tumour is of moderately small size, may often be detected resting upon its fundus, is at last, under greater cystic distention, made to take a position posteriorly, and falls to a plane lower than that of the fundus of the tumour, drawing with it the omentum, which, unless of unusual length, or adherent, is seldom found interposed between the anterior wall of the tumour and opposed abdominal surface. Under flatulent distension, the stomach, and probably transverse colon also, rest upon, and are supported by, the upper margin of the tumour, and thus the greater part of the abdomen is distended by a morbid growth of a certain figure, which, placed anteriorly, rests, to the exclusion of other viscera, against the anterior wall of the abdomen, and becomes bounded above, and in its hypochondrial regions, by hollow and commonly flatulent organs, while in its lateral boundaries are placed the ascending and descending portions of the great and hollow intestine. Perhaps no condition could be more favourable for the employment of percussion as a diagnostic means, and, accordingly, it is found to possess much utility. By its aid the boundaries of the tumour can be distinctly ascertained. Commencing by accurately percussing below, and traversing inch by inch the whole mesian line, uniform and marked dulness is elicited, until a spot is reached at or near to the ensiform cartilage, varying according to the size of the tumour, at which the dulness is abruptly changed for tympanitic resonance, and so clear and distinct is this line of demarcation in the great majority of examples, that the upper boundary of the tumour can be readily mapped out. If next, the same careful percussion be made parallel with the mesian line, from below upwards, on either side of the abdomen, through the lateral regions, the same dulness will be remarked, until a spot near to or below the cartilages of the ribs is reached; then dulness ceases as abruptly as before. This spot on either side of the abdomen will be found to be an inch or two lower than that at which in the mesian line the dulness on percussion ceased: a line traversing these three spots will describe a curve—it is the fundus of the tumour. If the percussion be now made in a line on either side from the linea alba outwards, into the lumbar regions, and a longitudinal boundary between dulness and resonance be thus ascertained by percussion, less marked it may be than in the former examination, but still evident; such boundary will mark the position of the lateral portions of that space which is found dull on percussion, they will

unite with the curve already detected above, and thus form an ovoid outline—the outline of the ovarian tumour. No position of the patient will alter the position of these lines of dulness and resonance,—in standing, or in the prone or supine positions, they remain unchanged.

53, Lower Brook-street.

[To be continued.]

REMARKS ON THE ETIOLOGY OF PHTHISIS.

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[Concluded from page 188.]

PAPER VII.

INFLUENCE OF OCCUPATION OVER THE DURATION OF PHTHISIS (CONTINUED.)

Table 57.

Females, æt. 20 to æt 30—No. 296.

Order.	Periods of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	9 months	51	5·8
2	6 ,, ...	49	6·
3	12 ,, ...	46	6·4
4	2 years	33	8·9
5	3 months	27	10·9
6	4 ,, ...	25	11·8
7	3 years	15	19·7
8	2 months	14	21·1
9	6 years	10	29·6
10	18 months	9	32·8
11	15 ,, ...	6	49·3
12	1 ,, ...	4	74·
13	2½ years	3	98·6
14	21 months	2	148·
15	10 years	1	296·
16	1 week	1	

Table 58.

		1 in
6 months and under	120	2·4
9 ,, ,, ...	171	1·7
3, 4, 6, 9 months	152	1 9
6, 9, 12 months	146	2·
12 months and under	217	1 3
2 years and upwards	62	4·7
3 months and under	46	6·4

These Tables prove, that between ages 20 and 30, the proportionate number of cases terminating fatally within 12 months is greater than was shown to occur for all ages; but this is less marked than at the period from age 10 to 20. There is also a slight tendency to prolonged duration. No marked difference occurs in the two sexes, except that the duration of two years and upwards is more frequent among females than among males.

The total number of cases abstracted between ages 30 and 40, including those of both sexes, is 611; and the whole are arranged in the following Table in the order of their frequency:—

Table 59.

General Table, both Sexes, æt. 30 to æt. 40—No. 641.

Order.	Period of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	12 months	110	5·8
2	6 ,, ...	99	6 4
3	2 years	86	7·4
4	9 months	84	7·6
5	4 ,, ...	51	12·5
6	3 ,, ...	36	17·9
7	18 ,, ...	34	18·8
8	2 ,, ...	34	
9	3 years	29	22·1
10	6 ,, ...	24	26·9
11	12 ,, ...	9	71·2
12	1 month	9	
13	11 years	5	128·2
14	2½ ,, ...	4	160·2
15	21 months	3	213·6
16	2 weeks	1	641·
17	1 ,, ...	1	

Table 60.

		1 in
6 months and under	231	2·7
9 ,, ...	315	2·1
3, 4, 6, 9 months	270	2·7
6, 9, 12 ,, ...	293	2·5
12 months and under	425	1·6
2 years and upwards	157	4·1
3 months and under	81	7·9

The number of males included in the preceding Table is 349, and of females, 292; and the cases are arranged in the following Tables:—

Table 61.

Males, æt. 30 to æt. 40—No. 349.

Order.	Period of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	12 months	69	5·
2	6 ,, ...	57	6·1
3	3 years	43	8·1
4	9 months	34	10·2
5	2 ,, ...	21	16·6
6	3 ,, ...	18	19·3
7	18 ,, ...	15	23·2
8	3 years	15	
9	15 months	11	31·7
10	6 years	10	34·9
11	1 month	7	49·8
12	12 years	6	58·1
13	14 ,, ...	2	174·5
14	2½ ,, ...	2	
15	1 week	1	349·

Table 62.

		1 in
6 months and under	142	2·4
9 ,, ...	176	1·9
3, 4, 6, 9 months	147	2·3
6, 9, 12 ,, ...	160	2 1
12 months and under	245	1·4
2 years and upwards	78	1·4
3 months and under...	47	7 4

Table 63.

Females æt. 30 to æt. 40—No. 292.

Order.	Period of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	9 months	50	5 8
2	2 years	43	6·7
3	6 months	42	6 9
4	12 ,, ...	41	7·1
5	18 ,, ...	19	15·3
6	3 ,, ...	18	16 2
7	3 years	14	20·8
8	6 ,, ...	14	
9	4 months	13	22·4
10	2 ,, ...	13	
11	15 ,, ...	11	26·5
12	21 ,, ...	3	97 3
13	12 years	3	
14	14 ,, ...	3	
15	2½ ,, ...	2	146·
16	1 month	2	
17	2 weeks	1	292·

Table 64.

		1 in
6 months and under	89	3·2
9 ,, ...	139	2 1
3, 4, 6, 9 months	128	2 3
6, 9, 12 ,, ...	133	2·1
12 months and under	208	1 4
2 years and upwards	79	3·7
3 months and under	34	8 5

The frequency of early termination is far less at this than at earlier periods of life, and is also somewhat less than that for all ages.

The frequency of more prolonged duration than in the Table for all ages is now well marked, much more so than has been observed at the previous ages. The termination

occurring before the ninth month is less frequent, and from two years and upwards more frequent, among females than among males.

The total number of cases occurring between ages 40 and 95 in both sexes is 754, and the whole are arranged in the following Tables in the order of their frequency :—

Table 65.

General Table, both Sexes, æt. 40 to æt. 95—No. 754.

Order.	Period of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	6 months	142	5·3
2	12 ,, ...	141	5·3
3	2 years	107	7·
4	9 months	84	9·
5	3 ,, ...	51	14·7
6	4 ,, ...	47	16·
7	3 years	41	18·4
8	6 ,, ...	33	22·8
9	18 months	32	23·5
10	2 ,, ...	27	27·1
11	1 month	11	68·5
12	15 ,, ...	10	75·4
13	12 years	9	83·7
14	2 weeks	7	107·7
15	2½ years	4	188·5
16	14 ,, ...	3	251·3
17	21 months	2	377
18	10 years	2	
19	30 ,, ...	1	754

Table 66.

		1 in
6 months and under	285	2·6
9 ,, ...	369	2·
3, 4, 6, 9 months	324	2·3
6, 9, 12 ,, ...	367	2·
12 months and upwards	510	1·4
2 years and upwards	200	3·7
3 months and under	96	7·8

The number of males and females included in the preceding Table is 446 and 308 respectively; and the cases are arranged in the following Tables in the order of their frequency :—

Table 67.

Male, æt. 46 to æt. 95—No. 446.

Order.	Period of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	12 months	83	5·3
2	6 ,, ...	81	5·5
3	2 years	57	7·8
4	9 months	46	9·6
5	3 ,, ...	36	12·4
6	4 ,, ...	33	13·5
7	3 years	26	17·1
8	18 months	22	20·2
9	6 years	21	21·2
10	2 months	13	34·3
11	15 ,, ...	7	63·7
12	1 ,, ...	7	
13	2 weeks	6	74·3
14	12 years	3	148·6
15	21 months	1	
16	2½ years	1	
17	10 ,, ...	1	446·
18	14 ,, ...	1	
19	30 ,, ...	1	

Table 68.

		1 in
6 months and under	176	2·5
9 ,, ...	222	2·
3, 4, 6, 9 months	196	2·2
6, 9, 12 ,, ...	210	2·1
12 months and upwards	305	1·4
2 years and upwards	111	4·
3 months and under	62	7·1

Table 69.

Females, æt. 40 to æt. 95—No. 308.

Order.	Period of Duration Arranged in the Order of Frequency.	Number of Cases.	Proportion to the whole.
			1 in
1	6 months	61	5·
2	12 ,, ...	58	5·3
3	2 years	50	6·1
4	3 months	39	7·9
5	9 ,, ...	38	8·1
6	3 years	15	20·5
7	4 months	14	22·
8	2 ,, ...	14	
9	6 years	12	25·7
10	18 months	10	30·8
11	12 years	6	51·3
12	1 month	4	77·
13	2½ years	3	102·6
14	15 months	3	
15	14 years	2	154·
16	10 ,, ...	1	
17	21 months	1	308·
18	2 weeks	1	

Table 70.

		1 in
6 months and under	109	2·8
9 ,, ...	147	2·
3, 4, 6, 9 months	128	2·4
6, 9, 12 ,, ...	157	1·9
12 months and upwards	205	1·5
2 years and upwards	89	3·4
3 months and under	34	9·

There is a close correspondence between the duration at this period of life and that for all ages, with the exception, that the duration from two years and upwards is more frequent. The lengthened periods of duration are also more frequent than at any previous periods of existence.

It has thus been demonstrated that, in early life phthisis runs a shorter course than in middle life and old age; while the disposition to an extended duration increases as youth passes into manhood, and manhood into old age.

As it respects the sexes, the duration under twelve months and over two years at the period of life between ages 40 and 95 is more frequent in females than males, and this feature is common to the females at each of the previous ages.

16, Norfolk-terrace, Westbourne-grove West.

CASES OF RECOVERY AFTER FRACTURE OF THE BASE OF THE SKULL.

WITH OBSERVATIONS.

By HENRY LEE, F.R.C.S.

Assistant-Surgeon to King's College and the Lock Hospitals.

Case 1.—Denis Foley, a labourer, aged 30, presented himself at King's College Hospital on the 15th December, 1851. He complained of numbness and want of power on the right side of the body, and a noise "like the sea" in the right ear. He was subject to attacks of giddiness, and upon one occasion had fallen down and completely lost the power of raising himself up, or of speaking. He remained, however, conscious during the time of everything that was going on around him. He was deaf, especially upon the right side, and appeared particularly stupid and apathetic. It was with the greatest difficulty that he could be made to understand or answer any but the most common questions.

Eight months previously he had had a compound fracture of the skull, caused by a brick which fell upon his head from a scaffold four storeys high. He remained insensible from the effects of the accident for three weeks, had bleeding from the left ear at the time, and had suffered from deafness ever since.

The persistence of the symptoms for so long a period after the occurrence of the accident, the peculiarity of manner, and the listless, apathetic condition of this patient, resembled the condition observed in the next case, after a somewhat similar lapse of time. The permanent effects of the injury in the two instances were sufficiently analogous to lead to the inference, that they depended upon the same cause.

Case 2.—A man, aged 45, fell from a railway platform about twenty feet, and alighted upon his head. He was

taken up apparently lifeless, bleeding largely, as was reported, from the mouth, ears, and nose.

Half an hour after the accident he was first seen by Mr. Goolden, of Maidenhead. The surface was then cold; the pulse 68, and very feeble. Three hours afterwards he was bled to sixteen ounces. The pulse now rose to 76, and the breathing, which before was rather oppressed, became more free. He was ordered some calomel, to be followed by moderate doses of senna till the bowels should be relieved.

On the second day the pulse in the morning varied from 90 to 100. The head was hot, the pupils dilated, and quite insensible to light. No motion could be excited by external stimulants, although he sometimes moved his limbs. No evacuation of fæces or urine. A pint and a half of water was drawn off. Twelve leeches were applied to the head. At noon the pulse became indistinct and difficult to count. No action of the bowels, although castor oil had been given in addition to the calomel and senna. The bleeding was repeated to sixteen ounces. The pulse became distinct during the operation, from 80 to 90.

In the evening he still remained insensible to all external impressions. There was still no relief of the bowels. Six grains of calomel and purgative draughts were repeated.

On the 3rd day the bowels were relieved, and he passed his urine without assistance. During the day he had a copious evacuation. The pulse was between 130 and 140; the breathing quick; the skin hot and dry. A blister was ordered to the neck. In the evening he could be sufficiently roused to answer questions, which, however, he appeared to do with great reluctance.

On the 4th day the pulse was 100; head hot; pupils still insensible to light. He moved in bed, but did not appear to feel when pinched. He took saline and purgative medicines.

5th.—There was more sensibility. Ten more leeches to the head.

6th.—The bowels acted freely.

7th.—He manifested slight sensibility in his limbs, answered questions more freely, and took whatever was given to him in the shape of food.

9th.—He became more sensible. The pupils now contracted to light, and he could see. Pulse 90 to 100. The radius of the left arm was found to have been fractured at the time of the accident.

11th.—Restless, irritable, and uneasy; moving his left arm and leaning upon it, quite regardless of the fracture. Twelve leeches were applied to the head, and, on the following day, another blister was applied to the back of the neck.

16th.—Had become much more sensible; pupils acted freely, and the heat of skin had abated.

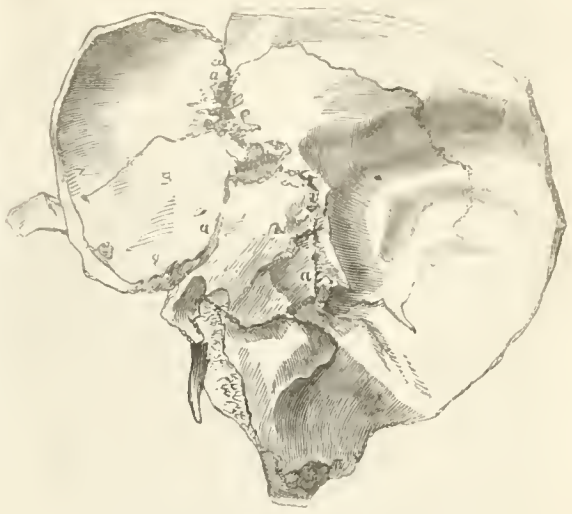
From this period the urgent symptoms gradually abated. At the expiration of a month he appeared dull, stupid, and extremely listless. He answered questions sullenly, and would frequently rest on the broken arm, as he had done from the time he first sat up in bed, without appearing conscious of any pain. The mouth was now gradually drawn to the left side, but the tongue was unaffected.

This patient continued under observation for seven weeks from the time of the accident, soon after which he resumed his duty of porter upon the Great Western Railway, his mouth at the time being still drawn in some degree to the left side. He occasionally complained of giddiness during his occupation, and found himself peculiarly subject to it in hot weather, after any violent exertion, or after taking a small quantity of beer. A pint of ale would render him quite stupid.

Six months after his first accident he was killed by a train on the railway.

Upon a *post mortem* examination, the recent injuries were found quite sufficient to account for his death, which must have been instantaneous. The parts concerned in the first accident remained, however, undisturbed. On removing the brain, a cavity about fifteen lines in length, nine in breadth, and three in depth, was found in its substance, corresponding to the petrous portion of the temporal bone of the right side. This cavity was lined by a yellow layer. It was completed below by the membranes of the brain, which were also covered by similar yellow matter. The cavity contained a turbid serum, in which were seen floating a number of exceedingly minute white globules. The brain around appeared perfectly healthy. Even within a line of the yellow layer above-mentioned, there appeared not the slightest change of structure.

A portion of the base of the skull was with some difficulty obtained.



Re-union of fracture of the base of the skull.

It shows that a fracture had passed down through the squamous portion of the temporal bone, whence it extended along the anterior part of the petrous portion into the Vidian canal. This fracture was met by another, which extended across the base of the petrous portion, into the jugular fossa. In the course of this last fracture were found numerous small rough particles of bone, which were detached by maceration. The petrous portion of the bone thus appeared to have been separated from the rest by the two fractures above mentioned; but nevertheless, in the space of six months, complete union had taken place, except at those parts which were occupied by the separate spiculæ of bone.

The symptoms in this case differed from any observed in ordinary injuries of the head, in their permanent character, in the paralysis appearing some time after the injury, and in the persistence of the power of voluntary motion at first, with the entire absence of sensation. Had the symptoms observed depended upon concussion, they would have diminished as the patient regained his consciousness. Had they, upon the other hand, depended upon compression, the paralysis would have been most strongly marked in the outset of the case. Nor does it appear probable that the symptoms in such instances depend upon the direct injury to the brain, for cases occur in which the brain is injured, and yet no symptoms present themselves analogous to those observed in the foregoing cases.

For instance, a child, 12 years of age, was admitted into St. George's Hospital during the time that I was house-surgeon. She stated that her father had thrown a piece of iron which had struck her upon the top of the head. For the moment she became confused, but very soon regained her senses, and walked to the hospital.

Upon examination, a wound, half an inch in length, was discovered, corresponding with the coronal suture towards the right side. A probe introduced at this point met with no resistance; but, upon being withdrawn, grated against the fractured bone. Pulsation was now distinctly perceived at the wound; the pulse was 104, and she complained of little or no pain. Two hours after her admission into the hospital, a small detached portion of bone was felt at the bottom of the wound; some dark substance was also seen in the same situation. This was removed, and proved to be some detached hair, about as much as would form a common camel's-hair brush. A small portion of the cerebral matter was now expelled at each arterial pulsation. The portion of detached bone was allowed to remain in the wound, which was covered by wet lint.

After being seven hours in the hospital she complained of some drowsiness; the pulse was 130, and there was pain in the head. She was bled to eight ounces, when she became faint and sick. The pupils were dilated, but sensible to the stimulus of light. She passed a quiet night, and on the following day the pulse varied from 100 to 118. She answered

quite readily when spoken to, and said that she experienced no pain in the head.

On the third day the pulse rose and increased in strength, and she was again bled to ten ounces.

On the fourth day there was a sense of weight at the top of the head. The pulsation from the brain could be distinctly seen in the wound, which was filled with healthy-looking pus.

Two small portions of bone and several hairs were removed from the wound on the 15th day, when no unfavourable symptoms had presented themselves.

On the 21st day there were some restlessness and a slight shivering. These were followed by an attack of erysipelas, which, however, produced no material disturbance of the general health. The wound in the scalp had entirely healed on the 34th day, and the patient left the hospital recovered, at the expiration of six weeks.

Instances might be multiplied to prove that injuries of the brain do not, in themselves, produce symptoms similar to those observed in the first and second cases above mentioned. The following were occasionally mentioned by Sir B. Brodie, in his lectures at St. George's Hospital:—

A boy had an iron spike run through the brain, nearly to the medulla oblongata. There were at first no symptoms of compression, but afterwards inflammation came on, and then symptoms of compression made their appearance.

A boy had a blow on the head and fracture of the bone. A surgeon removed the fractured portion, and found the dura mater wounded, and the brain protruding. The surgeon took away a portion of the brain, as much as would fill a tablespoon, and the next day he took away some more; the third day the boy walked home.

Since, then, the symptoms observed after certain cases of injury of the head, involving fracture of the base of the skull, may not be referred either to concussion or compression of the brain, or to a direct injury of the brain itself; it appears probable that they depend upon an influence exerted upon the nerves by the injured bones with which they are in contact.

In Case No. 2 the fracture had extended across the course of the seventh nerve. This would, doubtless, be sufficient to account at once for the deafness and loss of power upon one side of the face.

The complete union that existed in this case, wherever the fractured portions lay in apposition, proves that union may take place after fractures of the base of the skull—a circumstance long thought to be impossible. The union in such cases appears to be accomplished by a process originated and carried forward in the bones themselves, quite independent of the surrounding parts. No thickening takes place along the line of fracture, and, consequently, no projecting callus is formed. Should the line of fracture in such cases extend to a canal or foramen in which a nerve is contained, the functions of the latter may nevertheless be interfered with. In some cases the sheath of the nerve is probably at first only affected; in other cases the nerves themselves may be so bruised (as sometimes happens to the spinal cord in cases of fracture of the spine) as permanently to lose their power. In other cases, again, the nerves may be torn across by the displacement of the fractured portion of bone through which they run. A local paralysis or loss of sensation will then ensue quite distinct in its origin and effects from that produced by concussion or compression of the brain. In such instances the loss of nervous energy is not necessarily attended by any disturbance of the system. The parts to which the nerves are distributed may, however, be more or less affected as regards their nutrition and secretion, as well as their sensations and motions.

The following cases, selected from notes taken at different times, appear to illustrate these remarks, and to show that recovery, more or less complete, after fracture of the base of the skull is not of very uncommon occurrence.

Case 3.—Richard Hill, aged 51, became an inmate of St. George's Hospital, on Sept. 1, 1841, having, seven weeks previously, received a severe blow from a heavy piece of timber upon the left side of his head. He was rendered perfectly insensible by the accident, and lost a considerable quantity of blood from the ears, nose, and mouth. On the following day, when he regained his senses, it was found that the right side of his body was completely paralysed, and that there was ptosis of the left eyelid.

At the time of his admission into the hospital, he complained of much pain in the head, especially in the left side; the ptosis continued, and there was a discharge of pus from the left ear. He had recovered from the paralysis of the right side, but was still very weak, especially in his lower extremities. The left eye was turned inwards, and the pupil much contracted. He had lost all sensation in the left side of the face and upper part of the head; he could neither taste nor feel upon the left side of the tongue, except at its root; nor was he at all conscious of any sensation when a probe was introduced into the left nostril. The same want of sensibility might be observed in every part to which the branches of the fifth nerve were distributed.

A few weeks after his admission, this patient recovered the power of opening the left eye, and could close it firmly when required to do so. The eye generally, however, remained half open, and was seldom completely shut, even when an eyelash or other foreign body came in contact with it. For several weeks he appeared to have lost the sense of smell upon the left side; even the strong liquor ammoniæ presented to the left nostril produced no effect except that of lachrymation. At length it was discovered, that, owing partly to a deflection of the septum towards the left side, and partly to the imperfect action of the muscles, the left nostril had, under ordinary circumstances, become impervious to air. On dilating the left nostril artificially, it was found that he could smell equally well on both sides.

This patient remained under observation until the following February, up to which time he continued much in the same condition. The cornea of the left eye had, however, gradually become opaque, and towards the end of the time a considerable portion of exposed bone might be felt by a probe introduced into the left ear.

Case 4.—H. S., aged 40, was working on Battersea-bridge when a piece of timber fell upon the back part of his head, and knocked him into the water. He was shortly after brought to St. George's Hospital; he was then in a state of collapse, and there was a profuse bleeding from the ear. The persons who brought him said, that he had lost as much as two pints of blood from this source. Emphysema could distinctly be detected by the touch on the back part of the skull, the upper part of the neck and face. There were no traces of effusion of air over the chest. The pulse was feeble, and 60 in the minute; he had been bled, and had vomited previously to his admission into the hospital.

After the lapse of two hours, he recovered from his state of collapse. His pupils then were natural, and acted freely; there was no paralysis, complained of slight pain in the head, but none in the chest. He answered questions put to him very accurately, but rather slowly. Pulse still slow and feeble; the bleeding from the ear continued.

On the following day this patient evinced a very strong desire for sleep; the pulse was rather quicker, and conveyed a slight jerking sensation to the finger; the bleeding from the ear continued, but in less quantity. He was bled to twelve ounces. During the bleeding, the pulse became quicker and more full, but lost its peculiar character. On the third day the jerking sensation again returned. Slight effusion of blood from the ear continued. No symptoms of compression of the brain. The blood taken upon the previous day was buffed and cupped. He was again bled to nine ounces, which produced a marked effect in lowering the pulse; he was ordered some calomel and opium every four hours.

On the fourth day there was no pain in the head, pulse was slow and soft, and there was now a discharge of serum from the ear.

On the eighth day he became rather drowsy; the pulse was 48, and accompanied by a slight jerk. No pain in the head. He was bled to six ounces, when the pulse lost its peculiar character, and rose to 60. The blood drawn buffed and cupped.

In the evening this patient vomited continually, and complained of great pain in the head. Subsequently he became partially comatose. He appeared to hear the questions put to him, but did not give any answer. Pulse 70, and rather fuller than before the bleeding. Later in the evening he was seized with a fit, and fell out of bed. The fit had something of an epileptic character, and was accompanied with violent contraction of the muscles and with stertorous breathing. The pulse was feeble, the eyes fixed, and the pupils dilated. The muscular contractions were followed by a perfect state of coma. After a lapse of three hours he rallied a little, but not so as to answer the questions which were put to him. The pulse 72, communicating a slight jerk

to the finger. A blister was applied to the back; he was again bled to eight ounces.

On the following day this patient continued in a state of coma; the skin was hot, the pulse rather fuller, and the tongue covered with a brown fur. The blood from the last bleeding natural. Urine discharged involuntarily.

On the 11th day there was a marked improvement. The pupils became natural, and he answered all the questions which were put to him. He complained of slight pain in the head. The tongue was still covered with a brown fur, but was moist at its edges. Pulse full, but easily compressed, 60. Discharge of urine natural.

On the 13th day the effusion of bloody serum from the ear still continued. He continued to improve, but had not regained all his faculties. The tongue was still rather dry, and the pulse was full and slightly jerking.

On the 15th day the discharge of bloody serum from the ear ceased, and the patient was discharged cured ten days afterwards.

Case 5.—J. L., a middle-aged man, was brought into St. George's Hospital on July 16, 1836, having fallen from the top of a rick fifteen or twenty feet high. He alighted upon the left side of his head and face. He was bled soon after the accident. Upon his admission, he appeared quite unconscious. There was oozing of blood from the left ear, and the pupils were widely dilated; the pulse slow and oppressed; the breathing laboured, but not stertorous. He could be roused with difficulty, but not sufficiently to give an intelligible answer. Was reported to have lost a considerable quantity of blood from the ear.

During the day he continued in the same semi-comatose state. The pulse slow and feeble, and the pupils dilated. When roused, the pulse became sensibly quicker. Slight oozing of blood from the ear continued.

17th.—Can be roused with less difficulty, but relapses as soon as he is left to himself. Says he has very little pain in the head.

18th.—Gradually regaining his senses, and answers the questions which are put to him. The pupil of the right eye remains dilated, while that of the left acts naturally. Complains of pain across the forehead. Generally lies in an apparently half insensible state.

19th.—Has recovered from his stupor; his perception appears perfect, but his memory is almost entirely lost; complains of slight pain in the head, nausea, ringing in the ear, and specks before the eyes.

20th.—Pulse continues in the same state, never exceeding 60 pulsations in the minute.

21st.—Pain in the head has abated.

22nd.—The swelling caused by the blow upon the left side of the face has now subsided, and it is discovered that he has ptosis of the left eyelid; his intellect appears confused; pulse 52; pupil of the right eye unaffected by light; can see well with the left eye when the eyelid is artificially raised. The head to be shaved, and to be bled to 10 ounces.

23rd.—Has no recollection of being bled yesterday; there is some strabismus; can see well with either eye singly, but very indistinctly when he attempts to use both eyes at the same time.

26th.—Complains of slight ringing in the ears; pulse continues the same frequency; memory so impaired that he cannot recollect any of the occurrences of the previous day; can elevate the left eyelid by means of the occipito-frontalis; the only muscle of the eye over which he has command is the external rectus.

28th.—Pulse 68, higher than it has been since his admission; slight pain across the forehead continues; the pupil of the right eye acts very freely, but objects appear very bright when seen by that eye alone.

30th.—On waking this morning, he found that he could hear nothing, and could see very indistinctly; pulse not altered in character, but rises upon every exertion.

Aug. 3rd.—Says he feels quite well, and wishes to leave the hospital; his mouth was now affected with calomel and opium.

12th.—There is some difficulty in swallowing.

17th.—Left the hospital of his own accord.

Oct. 20th.—Has returned as an out-patient. Has recovered the use of the levator palpebræ, but not completely that of the other muscles of the eye; feels sometimes giddy after any extraordinary exertion; objects appear dim to the affected eye.

Dec. 6th.—Has still slight strabismus and double vision; can, however, see perfectly with either eye when the other is closed; has slight deafness upon the right side; has no pain, but says that the right side of his head sometimes appears as if dead; sensation upon that side is, however, not at all impaired. Complains of pain in the right arm above the insertion of the deltoid,—a symptom which has been present, in a greater or less degree, ever since he left the hospital.

13, Dover-street, Piccadilly, Feb., 1852.

SPERMATORRHŒA.

By JOHN L. MILTON, Esq., M.R.C.S.

Several cases of seminal emission having come under my care during the last two years, I am induced to communicate the mode of treatment I have adopted, as it has been very successful in my hands.

I have not been able to learn whether any other surgeons are in the habit of prescribing the same series of measures, and, having found no mention of it in books, I am disposed to regard it, if known, as confined to a few, and perhaps principally to those surgeons who have devoted themselves, in whole or part, to the study of venereal diseases of the organs of generation, under which this disorder is generally classed. It consists,—

1. *Of Quinine in Solution*, in the following form:—

℞ Quin. disulph. gr. vi.; acid sulph. dil. ʒj.; tinct. cardam. co. ʒiii; aq. cinnam. ʒvss. M. Sumat cochl. duo ampl. bis die.

Used in this way, one grain seems to have much more effect than larger doses with less acid.

2. *Of Local Baths of Cold Salt-water.*—As sea-water is often difficult to obtain, and the class of patients most subject to this disorder are extremely averse to a measure likely to induce suspicion that they are labouring under any disease of the generative organs, I generally direct the patient to buy a pound of common salt, break a piece off as large as a walnut, and dissolve it in half a basin of water. The scrotum and perinæum are then bathed with this by the aid of a sponge for five minutes every morning, and the water thrown away, so that nothing remains to excite any suspicion; those patients who are under no restraint may use a hip bath of cold solution of salt with the greatest advantage.

3. *Some Gymnastic Exercise every Day.*—The application of this remedy must naturally be modified by the patient's position in life; but even those most restricted can obtain a walk early in the morning and last thing at night. When this trenches on the hours of sleep it may be regarded rather as an advantage than otherwise; the less sleep the patient has the sounder it will be; the earlier he rises the better, the erections being generally most forcible and recurring most regularly in the morning.

When the weather does not admit of out-of-door exercise, I advise reading for a fixed time, as an hour or so every night; and if the patient be restless and unsettled, reading aloud, even when he is obliged to walk to and fro to accomplish his task, will often soothe down this excitement and dispose him to sleep.

4. *Of Checking the Erections.*—It will often be remarked, that the patient has erections two or three nights successively. When these awaken him, I find it best to treat the case like one of chordee, and direct him to rise and take a teaspoonful of spirit of camphor in water. This will generally allay the priapism, and prevent its recurrence. On those nights when he expects the emissions, a dose may be taken last thing at night.

The bowels should be kept loose; and, for this purpose, five grains of blue pill may be taken occasionally, in conjunction with rhubarb. When this does not act, the sulphate of magnesia may be added to the mixture.

5. If these measures do not suffice to cure the disease, I would advise blistering. If applied on the perinæum, it acts most efficiently; but, in some instances, I have seen this followed by a troublesome crop of boils; this I have never seen from a blister on the penis, where it can be applied and dressed much more easily, and where it really occasions much less soreness and difficulty in walking. If the patient objects to this, it may be laid on the groin.

Those cases in which I tried steel failed. In place of acting beneficially, it seemed to heat and over-stimulate the

patient, and even to dispose more to erections. In that shattered state of the frame in which the semen passes away involuntarily, and almost without an erection, it may be useful, but I am inclined to rely more on the measures I have laid down.

Some surgeons, considering this disorder, in many instances, as merely an effort of nature to throw off an accumulated secretion, recommend connexion. I would neither recommend nor forbid it, unless I found it acting injuriously. In some cases the patient takes it for granted, that, if this be THE remedy, medicines, gymnastics, etc., can do him no good, and, shaking off all restraint, gives way to the worst excesses. The plan, too, is not free from danger to the surgeon's reputation. Only very recently, a patient placed himself under my care for seminal emissions. He had suffered under them for a long time, and had consulted a surgeon, who advised him to have connexion. The result was a gonorrhœa, which took two months to cure; and this mistake unsettled all his former confidence in his medical adviser.

When self-pollution or excessive connexion is indulged in, I only know of one remedy, and that is, the employment of some irritative ointment to the penis, such as that of bichloride of mercury, ʒss. to ʒj.; deut. iodide of mercury, ϑj. to ʒj.; or the ung. ant. pot.-tart. I have found it most efficacious when applied only once a week, so as to keep the penis gently sore, as otherwise he may grow alarmed by the severe blistering and pain which the ointment occasions when used too freely.

Here it is useless to reason with the patient; he will, even with the most sincere desire to give it up, continue his baneful practices, and those who have command enough over themselves to abstain during the day, often resort to this habit when asleep. The only way to break him of it, is to make the penis so sore, that he is at once awakened by the smarting so soon as he commences any attempts at friction. When once the habit is fairly broken off, he rarely recurs to it.

The despondency of spirits, the loss of appetite, flatulence, weakness, pain in the back, etc., under which many of these patients labour, are generally removed by adopting a plain diet, as weak coffee, toast, and bacon, for breakfast, an early dinner, consisting of a chop or two and bread, strictly excluding all porter, vegetables, cheese, pickles, or pastry; as little tea as possible; and in the evening, instead of supper, a basin of tapioca, ground barley, or arrow-root, with a biscuit.

A persevering use for a few weeks of this treatment will, I think, effect a cure even in the most inveterate cases.

40, Jewin-street, City.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

GUY'S HOSPITAL.

By ALFRED MASSEY, Esq.

FIBROUS TUMOUR OF THE LABIUM—ENUCLEATION—RECOVERY.

Case 1.—Ann T——, aged 48 years; diseased 2½ years. Admitted Feb. 5th, 1852, under care of Dr. Oldham, into Lower Petersham House, Guys. She is a remarkably healthy woman, of florid complexion, stout, and well formed. She is a native of the Isle of Wight, and the wife of a respectable farmer of that island; has been married 30 years, and borne four children; the last pregnancy occurred 20 years since; has at all times enjoyed most excellent health, but subject to slight attacks of dyspepsia. Relations and family are all healthy, and free from any hereditary predisposition to gout, rheumatism, or phthisis.

She passed through her uterine life with ease and regularity; the catamenia ceasing abruptly five months ago.

Two and a-half years ago she first observed a small swelling, about the size of a nut, on the right labium externum, which was accompanied by occasional slight pains. This she attributed to a strain, and did not take further notice of it. The tumour went on slowly increasing, and at the expiration of twelve months had attained the size of a small hen's egg. During the ensuing twelve months its growth was equally slow, and unattended by any great inconvenience, but on the cessation of the catamenia, it increased in size much more rapidly, until it so far interfered with her comfort, as to induce her to seek medical aid.

The swelling was then supposed to have been a hernia, and was treated accordingly, being subjected to the inconvenience of wearing a pad and truss, having first been pushed back towards the vagina. This treatment increased her pain and misery, and, with a view of obtaining a more efficient means of support, she came to London, where she consulted Dr. Oldham, who pronounced it to be a fibrous tumour of the labium, and advised its removal, for which purpose she came into the hospital.

General Examination.—Respiratory and circulatory organs and functions healthy. Heart's rhythm regular; impulse moderate; pulse equable, tolerably firm, 80. Suffers from occasional headache and vertigo, occasional nausea, and vomiting. Tongue perfectly clean and moist. Bowels regular; urine free, frequently depositing a lateritious sediment. Nothing abnormal about the abdomen beyond tenderness and sense of oppression at the epigastrium, particularly after meals.

The right labium presents an ovoid enlargement, extending from the commencement of the labium externum to its posterior commissure, in length measuring about 5 inches, 3½ to 4 in breadth, and about 2½ inches above the left labium, which it partially overlaps and hides. Its surface is perfectly even, the integument covering it rather tense, and readily and freely movable over the mass; its structure is soft and yielding, and so like a fluid sac, that a grooved needle was passed into it, which was, however, only followed by a little blood.

She was ordered to be kept quiet and at rest. Bowels to be kept open by saline rhubarb powder; having done which, on the 5th day of admission, was operated on by Mr. Alfred Massey, in the presence of Dr. Oldham and Mr. Poland. An incision was made in a longitudinal direction from one extremity of the labium to the other, to the inner side of a large venous trunk, and just within the mucous surface. A finger was then introduced between the integuments and tumour, and its loose connexions with the surrounding tissues forcibly torn through, and the mass completely enucleated. One artery of considerable size was tied, but the further bleeding was entirely venous. A compress of lint was then placed in the wound, and pressure made upon it by means of pledgets of lint and a T bandage. The tumour measured about 4½ inches in length, 3½ in breadth, and 2½ in depth, was invested by a complete covering of cellular tissue but slightly adherent, its surface being perfectly even, and of a pale pinkish white colour; externally its structure was soft, but internally it had a more dense nucleus. *On section* its surface was of a pale pinkish colour, almost white, having the appearance of white fibrous tissue; internally its texture was more dense than externally, and also less vascular. *Under microscope* presented a cellulo-fibrous structure, having numerous cells embedded in a fibrous net-work; no appearance of malignant matter.

The wound has maintained a remarkably healthy appearance, granulations springing up in all directions. Suffering from no constitutional disturbance whatever, the only application used being warm-water dressing, with pressure.

Observations by Dr. Oldham.—Among the tumours which attack the external labia, the fibrous tumour has not been noticed by the more popular and recent writers on the Diseases of Women.(a) It is far more rarely met with than the encysted tumour of the labium, the warty growths, the hypertrophied labium, or even the epithelial cancer of this part. But it is more frequent than the tumour which has been called the oozing tumour of the labium, of which not a solitary specimen has occurred for the last fifteen years in Guy's Hospital. The foregoing case affords a favourable example of the locality of the fibrous tumour, its slow growth, the symptoms it produces, its diagnosis and treatment. It is developed in the cellular tissue of the labium, of a round or ovoid form, of little sensibility, gliding easily beneath the integument, which is unaltered in colour; it is in itself sparingly vascular, although, according to the size of the growth, some arteries of varying calibre coil upon its envelope, and then penetrate within it, and return the blood by corresponding veins, both classes of vessels being comparatively unsupported in the surrounding loose cellular tissue. It is slow in its increase, but it enlarges more rapidly during pregnancy, and after the last menstrual crisis. The symptoms it produces are more inconvenient than painful, and increase with its development. When small, it is only discovered accidentally; but, as it grows, pains of a dull, tense, dragging character are felt in the labium, increased by walking exercise; and at last it may interfere with progression and sexual intercourse. The tumour in this case had been mistaken for a hernia, and it had been subjected to injurious pressure by a truss. In other cases which I have seen, the tumour not being so large, has occupied the central or lower part of the labium, and has been so defined and isolated as at

(a) Churchill, Ashwell, Meigs, Boivin, Safford Lee.

once to prevent any error of this kind. But in the present case it had grown sufficiently upwards to swell out the upper part of the labium, near the external abdominal ring, and to require, therefore, the consideration of its possible hernial origin. On handling it, however, the physical character of the mass was quite unlike either intestine or omentum; it was readily removed from the abdominal ring, which was felt to be quite clear, and coughing had no effect upon it, and there was no difficulty in at once determining that it was a tumour altogether independent of hernia. The fibrous tumour is far more likely to be confounded with the cysts of the labium, and, indeed, their physical characters are often so strikingly alike, that the diagnosis can only be made out by puncture. When very small—about the size of a nut—the cystic tumour is as hard, movable, and in the same position, as the fibrous tumour, and, even in larger growths, the two tumours are closely alike. In the fibrous tumour the tissue is so little consolidated, and is set in so loose a bed of structure, as to give it, when handled and touched with the greatest care and nicety, much more the feeling of a fluid than a solid; and it was on this account that I passed a needle into the tumour in this case to make sure of its fibrous character. The diagnosis is of importance, because the operation for removal, which is the only practicable cure in the fibrous tumour, is a tedious process when dissecting out a cyst which may be cured by other less formidable means. My clinical clerk, Mr. Massey, enucleated the tumour, when it had been exposed by a free longitudinal incision, with the fingers, and, in this way, broke through the blood-vessels which supplied it. It is of some practical importance to remember, that these tumours are closely coated with a covering of dense cellular tissue, and it is necessary to cut through this in order to turn out the growth. It is quite easy for the operator to mistake the capsule for the surface of the tumour, and to be trying to separate the integument from it, which would be a long process, and, to prevent this, it is better to cut slightly into the tumour itself, when the edge of the capsular covering is at once indicated, from whence the enucleation is readily completed. The venous bleeding requires to be controlled by a sponge and pad.

LARGE POLYPUS OF THE UTERUS REMOVED BY LIGATURE.—RECOVERY.

Mary A. Cowell, diseased eight months, aged 47, admitted January 19, 1852, into Lower Petersham Ward, under the care of Dr. Oldham.

Patient is a native of London, and resides in St. George's-in-the-East; has been married twenty-three years; her husband a labourer, she being engaged as a needlewoman; have lately been in very straitened circumstances, and until within the last three years enjoyed excellent health. Never miscarried, and has given birth to three children, the last pregnancy occurring twenty years ago.

The first catamenial period occurred at the age of eighteen, and from that time she menstruated regularly every month, the flux being scanty and unattended by pain previous to marriage, but soon after it became more profuse, usually lasting about seven days, accompanied by pain across the lower abdominal regions, both of which have been greatly augmented during the last three years.

Eight months previous to admission was suddenly seized with violent pains of a forcing nature in the hypogastric region, which were succeeded by the passage of several clots, and then a large quantity of fluid blood, which continued to a greater or lesser amount during one month, which was then followed by a muco-purulent discharge, of an offensive odour. At the expiration of a week the hæmorrhage recurred, since which it has continued without intermission, although not to so great an extent, until three weeks ago, when she was first seized with crampy pains about the hips and lower part of abdomen, followed by the discharge of a large quantity of limpid fluid, of an extremely fetid odour.

Beyond the above symptoms, she has at no time suffered from any pain, unnatural sensations about the thighs, dragging or bearing down, or uneasiness of the pelvic viscera, impediment to the healthy action of the bladder or rectum, swelling of the lower extremities, and, when admitted, she only complained of excessive debility, loss of strength in the lower limbs, and constant sanguineous discharge.

On examination presents the following appearances.—

Sallow, cachectic, fair complexion; body stout and well formed; skin cool and moist, and extreme pallor of surface; tenderness, and some induration of both mammæ, particularly the left; pupils equal, active, and moderately contracted; tongue slightly furred posteriorly, moist, pale, and indented; lungs appear to be perfectly healthy; no venous murmur heard over the jugular veins, or in the præcordial region, heart sounds being perfectly normal; pulse feeble, regular, and easily compressed; suffers from occasional nausea and vomiting; slight pain in right hypochondrial region; no headache, vertigo, or thirst; her appetite is good; bowels freely relieved; urine copious.

Examination per Vaginam.—On introducing the index finger, its progress is arrested by a round globular swelling, which occupies the upper part of the vagina, extending so high that its pedicle cannot be reached by the finger at its fullest stretch. It is insensible to the touch. The uterus cannot be reached from within. *Externally* there presents a central globular tumour, capable of being moved in the abdomen, extending as high as the umbilicus, and occupying the space and position of a gravid uterus between the fifth and sixth month.

Jan. 19.—With the view of checking the hæmorrhage, she was ordered acidi gallici gr. iv.; quinæ disulph. gr. i.; ex infus. rosæ co. ter die sumend. This medicine speedily produced the desired effect, so that on the seventh day Dr. Oldham considered that she was in a fit state for the operation.

26th.—Accordingly he passed a ligature around the tumour by means of the double canula. But slight pain was experienced during the operation; but, towards evening, she had a considerable amount of forcing expulsive pain, with some slight tenderness over the uterus and left ovarian region, with great difficulty in passing her urine, but without any symptoms of febrile excitement. The ligature was slightly relaxed, and she was ordered Pulv. opii gr. i.

27th.—Passed a very comfortable night, but has suffered considerable increase of pain in the hypogastric region, with tenderness. Unable to pass her urine. Uterus hard and full; skin cool and perspiring. Pulse feeble, regular, 90. No febrile symptoms. Ordered pulv. ipecac. co. gr. x., h. s. Catapl. lini abdom. Bladder relieved 11 a.m. Towards evening more comfortable. Passed urine naturally.

28th.—Feels generally much easier; but still suffers considerable pain, which she compares to that of labour. Passed a good night, and has had no further retention of urine. 2 p.m., has had considerable oozing of dark blood, which has relieved the pains to a great extent, which are now chiefly paroxsymal, occurring every quarter or half hour. Abdomen is less sensitive, but slightly distended with flatus. On examining internally, the polypus is felt soft and ragged, as though breaking up. Appetite continues good.

Ordered port wine ʒvi. Injection of warm water per vaginam, (there being a slight fetid vaginal discharge).

29th.—Oozing of blood still continues. Discharge also increasing. Pain much the same, and in every respect as above, and continued so until

Feb. 1st, when the pains became very acute, with powerful expulsive efforts; increased tenderness in the uterine region; slight bilious vomiting; abdomen flatulent; bowels not relieved since the operation; suffers from headache. Discharge copious and extremely fetid. Skin rather dry, not hot. Pulse 100, feeble. Ordered mist. salin. quartis horis.

2nd.—Pain is almost continuous, and suffering frequent aggravations. The tenderness over uterus has not, however, increased, nor is there any general tenderness of the abdomen. Nausea and vomiting less distressing. Skin dry, and rather hot. Pulse 112, inclined to be a little hard. Tongue furred, but moist. Bowels confined and flatulent. Discharge very profuse, also passes numerous white shreds, not unlike thick mucus. Ordered ol. ricini ʒss et P.

3rd.—Bowels freely relieved, and since which the pain has been greatly alleviated. Tongue cleaner. Skin less hot, and moister. Pulse 100, softer. After which, she continued tolerably easy, with decrease of all her febrile symptoms, but occasional recurrence of expulsive efforts, but which were attended by much less pain than before.

7th.—This morning the ligature came away, and soon after the remains of the polypus, which was about the size of a large goose' egg. The structure was a fibrous tissue, in which several large veins were seen. The separation was not followed by hæmorrhage nor any other discharge, and has felt very few slight pains since. The volume of the uterus speedily reduced, not extending further than midway between umbilicus and pubis. She has since been progressing most favourably, has had no return of pain, hæmorrhage, etc. Uterus slowly but gradually decreasing in size, and her health rapidly improving, with the assistance of tonic medicines.

Two days after the separation of the polypus, the cervix was so far closed that no more than the forefinger could enter it easily.

Observations by Dr. Oldham.—When first this poor woman appeared among my out-patients, her countenance was haggard,

anxious, and perfectly pallid. She was so feeble, that she could not walk without being supported; and there was a fetor about her, which, with her general aspect and age, made me remark that she was either the subject of advanced cancer or polypus. When the latter has existed for some time, is of large size, and especially when hæmorrhages have been replaced or accompanied by constant copious serous discharges, of a fetid pungent smell, the patient emaciates, and in resemblance closely copies the malignant character. It was only necessary to make a physical examination, and to connect it with the history of the case, to see that the cavity of the uterus and the upper part of the vagina were distended with a large polypus, which had been growing for a length of time, giving rise to first, profuse menstruation, then more copious and irregular hæmorrhages, and then a constant draining of a more watery discharge, slightly coloured with blood. When lying on the back, the body of the uterus was readily defined occupying the abdomen below the umbilicus, hard, but even, as though the swelling arose from its cavity being filled, rather than from any enlargement from its walls. A large, solid, globular, insensible tumour, almost filling the cavity of the pelvis, and running as far as could be reached by the finger towards the cavity, were the indications of a polypus, probably of a fibrous character, springing from within the uterus.

Having kept this patient at rest for a week, and recruited her feeble powers by diet, and the exhibition of quinine and gallic acid, I applied a strong whipcord ligature around the polypus. The instrument which was used in this case, was a modification of Gooch's double canula, which, in my experience, is by far the best when the polypus is large, high up, and closely girthed by the vagina. The mode of applying the ligature was by carrying the two canulæ together in front of the polypus, and beyond its body, then separating each canula, and directing them simultaneously backwards, so as to let them meet at the back part of the polypus, by which time the growth was noosed. Dr. Gooch recommends one canula to be separated, and to be carried round the polypus until it reaches the starting point where the other has been fixed. This is a far more difficult process, and I have seen an instance very closely resembling the above detailed case, where the physician abandoned the operation, after trying it for a length of time, from keeping too closely to Dr. Gooch's rules. The polypus in the case related was easily secured, and the ligature was drawn tight without producing pain. When the polypus is somewhat smaller and lower down, the ligature may speedily be passed around it, by placing the index and second fingers, each upon one of the canulæ, then separating the fingers and sweeping them around the polypus, so as to meet at the opposite side, the canulæ being pressed before them. Whenever it is practicable, I employ a single canula, through which the whipcord ligature is run, because it is a simpler instrument, and it clips the pedicle better and promotes its earlier detachment. But it is only in smaller polypi than that which is now being noticed that the noose can be adjusted by the fingers. One of the greatest practical improvements in the instrument for noosing polypi is in the contrivance for tightening the ligature, so as to exert considerable power over it, and to keep it well strained upon the pedicle. Mr. Durrock(a) some time since completed an instrument for me, under my directions, which fulfils these indications extremely well. The cross stem on which the ligature is wound is moved by a screw at the end of the instrument, acting through two cogged wheels, placed one at the side of the box and the other at the lowest part. A bolt at the side fixes the wheels, so that the ligature cannot slip back. By this instrument great power may be easily used, and it is altogether convenient and useful.

Dr. Oldham's Polypus Canula.

The pedicle in this case must have been very large, from the length of time consumed in separating it, during which the polypus shrank very much. The structure of the growth was fibro-muscular, like the uterine structure, and not a fibrous tumour pediculated. Some veins were visible in its centre. The patient is now recovering from the effects of her previous hæmorrhages and discharges, and is in every respect doing well.

(a) 2, New-street, St. Thomas's-street.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, March 6.—Medical Society of London. *Election of Officers* at Seven o'Clock. Reading of Dr. Forbes Winslow's Paper, "On Idiocy and its Treatment," at Eight o'Clock.

——— ——— Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Monday, March 8.—Medical Society of London. *Oration*, by Mr. Canton, and *Anniversary*, at the Albion Hotel. Five o'Clock.

——— ——— Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.

Tuesday, March 9.—Royal Medical and Chirurgical Society. Half-past Eight o'Clock.

——— ——— Royal Institution. *Subject:* — Professor T. Wharton Jones, "On Animal Physiology." Three o'Clock.

Wednesday, March 10.—Geological Society. *Subjects:* — 1. J. Brown, Esq., F.G.S., "On the Freshwater Beds and Boulder Clay of Copford, Essex." 2. Rev. H. M. De la Condamine, F.G.S., "On a Reversed Fault at Lewisham." 3. J. H. Blofield, Esq., "Notes on the Island of St. Helena." Half-past Eight o'Clock.

——— ——— Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock

Thursday, March 11.—Royal Institution. *Subject:*—Rev. J. Barlow, M.A., Sec. R.I., "On the Physical Principles of the Steam-Engine." Three o'Clock.

Friday, March 12.—Royal Institution. *Subject:*—Dr. W. B. Carpenter, "On the Influence of Suggestion in Modifying and Directing Muscular Movement independently of Volition." Half-past Eight o'Clock.

Saturday, March 13.—Medical Society of London. *Subject:*—Dr. Handfield Jones, "On the Morbid Anatomy of the Kidney, in reference to Albuminurea." Eight o'Clock.

——— ——— Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Medical Times & Gazette.

SATURDAY, MARCH 6.

THE INCOME TAX.

An Englishman takes a common-sense view of a question. He knows that the expenses of the State must be met; that Government must have money to defray the cost of the Army and the Navy, and to pay the interest of "the debt;" and he knows, too, that the money required for these purposes must come out of his pocket; so he pays, and pays, whatever he may say to the contrary, willingly. But while willing—provided only he be allowed to grumble—to pay the sum that is due to the State, he is not ready—grumble or no grumble—to pay more. Now, as at present levied, the Income-tax takes from a majority of those who pay it more than the share that fairly falls to their lot; and therefore are these parties deeply dissatisfied—it is not simply grumbling, but a feeling of bitterness, which no utterance of discontent can assuage. Of the unjust bearing of the Income-tax, our own Profession affords the most forcible examples. A hard-working country practitioner earns say 400*l.* a year; he is a married man, and has a family—a single man would have but little chance of such success—out of his yearly earnings, he might possibly contrive, with economy, to put by a small sum for emergencies, and also to pay something annually for the purpose of securing a trifle for his children at his decease. To meet the expenses of his sons' education, he will need all that strict economy has enabled him

to save from his hardly-earned income; and, should a lengthened illness precede his own death, the probability is, that debts will remain to be paid out of the little sum he had intended as a provision for his widow and daughters. His neighbour, Mr. Comfortably-off, has 14,000*l.* in the funds, and receives his dividends regularly as the quarter-days come round. The surgeon and his neighbour have the same yearly income. But one is comparatively a rich,—the other comparatively a poor man. Does the surgeon fall sick, his income ceases; does he die, his widow and children are left to battle almost penniless with the world. The 400*l.* which he earns year by year, is really, in his case, as capital; for, if he die at the expiration of a year from the time he first gains so much, then the whole of his property is represented by that 400*l.*—that sum would be all he had ever possessed. How different the case of his neighbour!—his 400*l.* a-year is *bonâ fide* income; if he die his capital remains, and the same income—the same representation of capital falls, to the share of his children.

Now, the injustice of taxing the yearly receipts of these two men the same sum is so apparent, that argument on the matter would be words thrown away. The income of the one represents 14,000*l.*; the income of the other only the incessant wear and tear of bone, muscle, and brain. The income of the one is received whatever be his personal state, and when he dies passes to his descendants; that of the other diminishes when sickness overtakes him, and ceases altogether when death removes him. If the former die one year after he received his 14,000*l.* and had spent nothing, he would, at the time of his death, be possessed of 14,400*l.*; while the other, under like circumstances, would be in the possession of 400*l.*; and yet, by the action of this iniquitous law, these two men are called on to contribute annually the same sum to the State.

Finance Ministers tell us the burden cannot be more equably adjusted; they admit that the members of our Profession, in common with others, have a just cause of complaint, but plead their inability to devise a better scheme. Medical men are not financiers, their duties are far removed from those of the accountant; and yet we think we could name some half dozen who could very quickly prescribe a much more evenly-adjusted tax than this,—one that would produce as much money, but fall with less force on those little able to bear it. The subject will soon be again under the consideration of Parliament, and we trust that the result may be an honest arrangement. Of this much we are certain, that a more unjust one cannot be proposed. This concerns us all; let each one, then, strive earnestly in the matter.

THE NEW PHARMACY BILL.

Mr. Bell's Pharmacy Bill is again to be brought forward; and it is probable that if the honourable Member retain his seat, it will be passed by the House. The present Bill has the same merits and the same defects as its predecessors. That it aims at the reformation of scandalous abuses, we most willingly allow; and that its scope and purport are honourable to its proposer we can assert with the greatest pleasure. But still the positive demerits of the Bill compel us reluctantly to refuse it our support.

We should be glad to have a registration and examination of chemists, and we regard the utter want of surveillance over the sellers of medicine as one of the crying evils of the day; but we most strenuously oppose any legislation for the chemists by themselves, unconnected with the great medical body of which they form a part. We still consider that the interests of those General Practitioners who sell medicines will be seriously compromised by this Bill, unless some means be taken to prohibit the treatment of disease by chemists and druggists. If this be not done, the chemists, who will be well educated and clever men, will entirely supersede the apothecaries, who were the original sellers of medicine, and who properly should be the only persons authorised by the Legislature to sell medicine. If this is now impossible, if the encroachments of the chemists on the province of the apothecaries have become so established by time and custom that the present state of things cannot be altered, it is at any rate just and reasonable that the apothecaries should not be sacrificed without reflection to the pretensions of a rival class.

Mr. Bell may reply, that he in no way touches the interests of medical men. This may be at present true, as far as regards those medical men who do not live by the sale of medicines; but it is not true as respects that large class whose chief profits are derived from their shops. The apothecaries have been from time immemorial vendors of drugs; while the chemists and druggists, taking advantage of the imperfection of the law, have stolen, of late years, into the trade. To legitimise their present position, to raise them in the eyes of the public, by granting them diplomas, is virtually altogether to annihilate the retail apothecaries.

There may be some among us who will rejoice at this inevitable separation between the prescribers and vendors of drugs; but we cannot thus see with indifference the interests of a large class jeopardised. Besides, it requires no prophecy to perceive, that, ere long, these very vendors will not only prescribe over their counters, but will encroach on the domains of the prescribing General Practitioners.

We take also another objection to this Bill, and that is, the probable obstacles it may throw in the way of the future settlement of Medical Reform. It proposes to found another corporate body,—the Pharmaceutical Society,—who will thus become endowed with rights and privileges which they will not readily surrender. We have had enough of these isolated corporations, whose privileges stand in the way of every grand improvement, and which are only justifiable in the infancy of organisation, when, as among some of the lower animals, each portion of the frame is endowed with an independent vitality and power of existence. As organisation perfects itself, the limbs and organs can live only when in connexion with the general trunk.

The whole purpose of the Bill would be answered by having a registration of chemists and druggists, and instituting an examination for them at Apothecaries' Hall, or at the University of London. The penalties for practising without a licence might remain the same, and the chemists would thus be regulated without the foundation of another corporation.

We should be happy to support this Bill, if it could be shown that our apprehensions of its effect on the Apothecaries, and on the general question of Reform, are groundless. Till then, we must oppose it; and we call on the Society of Apothecaries to look into this matter, and see how the interests of their licentiates stand affected by it. It is a matter which will bear no delay; for, if the Bill once become law, they may rely upon it that there will be no repeal.

The Voltaic Pile.—The President of the French Republic has published a decree offering a reward of 50,000 francs (2,000*l.*) to such person as shall render the voltaic pile applicable with economy to manufactures, as a source of heat, or to lighting, or chemistry, or mechanics, or to practical medicine. Persons of all nations may compete for this prize, and the competition is to be open for five years.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

PARISIAN MEDICAL SOCIETY.

The annual dinner of the members of this Society took place on Saturday last, at the Trois Frères, in the Palais Royal, MM. Ricord, Trousseau, and Cl. Bernard, the distinguished experimental physiologist, being among the gentlemen present. Dr. Sanderson, the President of the Society, officiated as Chairman, and, after a sumptuous dinner provided in a *recherché* style by the proprietor of the establishment, proposed successively the President of the French Republic, the Queen of Great Britain and Ireland, (which was most enthusiastically received, and followed by God save the Queen,) and the President of the American Republic. He then proposed success and prosperity to the Parisian Medical Society,—a Society, which, since its birth in 1837, under the auspices of its distinguished founder, Dr. Hughes Bennett, of Edinburgh, had continued to flourish; and, at the present day, although its members were not so numerous as in former years, yet he conceived its prospects were in a no less favourable and prosperous a condition. After entering into details of a private nature, he stated, that it had recently separated from the German Society with which it had been associated since the Revolution in 1848, and that apartments, consisting of a reading-room and library, had been taken at No. 44, Rue Monsieur le Prince, where the meetings of the Society were now held. The next toast was that of the Faculty of Medicine of Paris, associated with the name of Professor Trousseau, to whom, the Chairman considered, British students were much indebted for his valuable services in the elucidation of the diseases of children at the Hôpital des Enfans Malades. M. Trousseau replied in French; and, after apologising for not speaking English fluently enough to express his sentiments to the gentlemen present, stated, that it was always his especial pleasure to receive English students at the Enfans Malades, and that, in showing them all that lay in his power, he was only in a very feeble manner paying off a debt of gratitude which he owed to the British Medical Profession for the very marked kindness and hospitality which he had everywhere received on visiting the British Isles. After a warm and eloquent speech, he concluded by proposing "The Medical and Surgical Schools of Great Britain and Ireland;" to which Mr. Pavy, on the part of England, Dr. Abercrombie, that of Scotland, and Dr. Macdonnell, that of Ireland, returned thanks in appropriate speeches. The Chairman then gave "The Hospitals of Paris." M. Ricord rose, and (speaking in English) said, that he was proud to own, that it had always been his especial endeavour to render the Parisian hospitals attractive and serviceable to foreign students. His friend, Professor Trousseau, and himself had been fellow-labourers in the same object. It would, indeed, be an act of ingratitude, if he did not exert his endeavours to aid the English student, since he himself owed so much to English medical literature, especially the writings of the great Hunter. He was glad to learn that the prospects of the Medical Parisian Society were in so favourable a condition, and observed, that it was not quantity but quality which conduced most to maintain its prosperity. He had the honour of having three times filled the President's chair of the Society, and although, from other professional engagements, it did not now lie in his power to attend its meetings so frequently as formerly, yet he still felt a deep interest in its welfare. Dr. Cowan, the Vice-president, then proposed the former Presidents of the Society, associated with the name of Dr. Oliffe, to whose services the Society had been, on several occasions, immensely indebted; and, after some other toasts, the convivial assembly dispersed about half-past 10.

M. Devergie has commenced his course of Clinical Lectures on the Diseases of the Skin, at the Hôpital St. Louis, and will continue them every Saturday, at half-past 9 a.m., till the end of July. The immense store of information afforded by the wards of this hospital, which is almost exclusively devoted to cutaneous affections, combined with the didactic abilities of the distinguished Professor, always attract a great number of students.

A concours is taking place in the Faculty of Medicine of Paris, to elect a Professor to the vacant chair of Hyiène. The candidates, five in number, write a thesis on the subject in question, which is read before a jury of fifteen, and criticised in their presence by each competitor. The immense amphitheatre of the Ecole de Médecine, capable of holding 2000 people, in which the meetings are held, is each sitting crowded to intensity by students and members of the Profession anxious to hear the criticism, which is carried on with a high degree of animation by the competing *savans* to the vacant chair.

SCOTLAND.

TRANSCENDENTAL MESMERISM IN EDINBURGH.

The mesmeric mania of 1850-51 has suffered a slight relapse; and, owing to the publication of the experience of Mr. Mark Napier, the Sheriff of Dumfriesshire, the subject again occupies no small share of public attention. It appears (though from Mr. Napier's letters other opinions might be entertained) that during last summer, when in London, Professor Gregory secured the services of a young woman, whose experience in clairvoyance is somewhat matured, she having been an apt instrument in the hands of its believers during at least several past years. This individual, some five months ago, entered into Professor Gregory's service as a domestic, and was by him brought to Edinburgh. During the first three months of her sojourn in this metropolis, we heard nothing regarding her; but since the eventful 7th of last January, the day on which the Sheriff of Dumfriesshire first made her acquaintance, her sayings, seeings, and doings have really occupied quite a prominent position. Every one who has not heard of Professor Gregory's "gifted domestic," is set down as alarmingly ignorant. It appears, both from what we have read and heard, that a large number of our fellow citizens have now paid her a visit or visits; and, while some have heard nothing from her calculated to establish their belief in clairvoyance, others, it would appear, have reaped an amount of benefit from the visit, which they consider to have been cheaply paid at 2s. 6d., and have left the Professor's house, with their faith in what he preaches either settled or confirmed. Among the earliest visiters to the clairvoyante housemaid was the sheriff of Dumfriesshire, who, not content with being himself converted, has sought, by the publication of four lengthy letters in the evening *Courant* newspaper to make converts of us all. A more wretched body of evidence brought forward with a view to establish belief in any doctrines we do not remember to have ever before seen; and we rather think that the more sagacious professors of clairvoyance will scarcely thank Mr. Napier for so obligingly exposing their weak points. The demand of a certain M.D., (whom we know, but whose name we are under promise not publicly to reveal,) that the clairvoyante be required to tell the number of the 100*l.* note placed in the Irish Bank, or to read the line of Shakspeare inclosed in a box, under the guardianship of Professor Simpson, has brought forward Dr. Gregory (very unwillingly, he says, though this we can hardly believe) as a newspaper correspondent, and, in three by no means brief letters in the same paper, this most indiscreet Professor labours partly to bolster up the paltry evidence of the sheriff and partly to dispose of the arguments of M.D. advanced in his subsequent letters, in opposition to the claims of transcendental mesmerism. In both of these endeavours Dr. Gregory signally fails, for, as M.D. asserts, any one who will dispassionately peruse Mr. Napier's letters will rise with the conviction, that by the mode of putting the questions, and by the good guessing of the clairvoyante, together with her reasonably presumable amount of previous knowledge, any part of her performance worthy of being called successful may be explained. The chief arguments M.D. has adduced we need not here refer to; they are such as commend themselves to all who have studied the subject, and have resisted the attempt to be led away. The singularly inaccurate manner in which Dr. Gregory relates his experiments, and the very slight, often rotten, foundations on which his most famous ones (and these the most difficult to understand) rest, M.D. has convincingly shown. M.D. asks no more than any believer or unbeliever in clairvoyance has a right to do, when he calls for the presence of an experienced reporter at all scientific experiments, and when he demands that the tests should be made as public as possible. The publication of the results of the interesting and important experiments made at Aberdeen, will show perhaps more than anything hitherto has done, to what a reed of straw they trust who place their reliance in the revelations of the believers in transcendental mesmerism.

We cannot conclude this, without expressing our belief that it would be much more creditable to Dr. Gregory, more beneficial to his students, and altogether more conformable to the dignity of his chair, if for the future he would devote himself a little more to chemical and physical discussion, and a little less to chimerical and metaphysical speculation.

NEW SURGICAL HOSPITAL.

It behoves us to mention what has for some time been forcing itself more and more upon our attention,—the approaching completion of a new surgical hospital. This event will prove quite an era in the history of Edinburgh, for, notwithstanding the remarkable frequency of hospitals in this capital, the new building is the first, during more than a century, destined for the reception of the sick

or hurt. It is situated between the Royal Infirmary and the present Surgical Hospital, with the principal aspect towards the south, facing Drummond-street. It is a handsome edifice, built from a design of Mr. Bryce, and capable of accommodating about 150 patients. There are also commodious kitchens, laundries, and other offices connected with it. When complete, the Royal Infirmary of Edinburgh will afford ample accommodation for at least 500 patients. In a recent inspection of the interior of the new building, accompanied by the excellent Superintendent of the Infirmary, Mr. Macdougall, we were struck by the small size of the wards, few being adapted for the reception of more than six or eight patients. This arrangement appears to offer many advantages in the treatment of surgical diseases. The erection of this new hospital has not occurred before an urgent call for it existed. Of late the number of surgical patients in the Infirmary of Edinburgh has undergone a very considerable increase, and much crowding and necessary reception in supernumerary buildings have been the consequences, by which neither the patients nor the students have been the gainers.

MEDICO-CHIRURGICAL SOCIETY AND ITS LATE HOMŒOPATHIC MEMBERS.

We have before us the list of the members of this Society, of date January, 1852, and a most interesting document it is,—exhibiting the Society free from the contamination of its homœopathic members. Is there any other Medical Society in the United Kingdom which can show so clean a front? That their ceasing to be members of the Society is a penalty severely felt by these gentlemen, we presume is pretty evident from the circumstance, that most of them have hitherto neglected no opportunity of recording the honour they enjoyed in belonging to it. Even in the *Medical Directory* for Scotland, just published, the name of one at least of these gentlemen will be found followed by the title of which he is now not possessed. Another is guilty of the strangely inconsistent conduct of publishing an overgrown pamphlet, in which he loads the Society with vituperative abuse, and at the same time labours to place himself in the most favourable point of view in the eyes of its members.

PROPOSED REPEAL OF UNIVERSITY TESTS.

Public attention is strongly directed to the Lord Advocate's Bill for the Abolition of University Tests in Scotland. The necessity there exists for the removal of these tests, the existence of which we cannot but regard as a strange relic of the middle ages, is clearly seen by the present aspect of matters in connexion with the vacant Greek chair. Of upwards of twenty candidates, there are only four who could with propriety or an easy conscience sign the tests.

GENERAL CORRESPONDENCE.

PRUSSIC ACID IN OPHTHALMIA.

[To the Editor of the Medical Times and Gazette.]

Sir,—About ten years ago, as you are no doubt aware, the Profession, the public, and those who laboured under any defect of vision in particular, were treated to a new cure for blindness in the shape of the vapour of prussic acid. The applicability of this remedy was universal, its immediate efficacy infallible. Cases of amaurosis, cataracts in all stages, corneal opacities of every class, vanished before its magic influence. The medical journals gave the respective cases in detail; the newspapers and minor periodicals, without entering into the merits of the remedy, or analysing the cases cured by it, devoted their columns to its service, or, rather, to the service of its priests and promoters.

Well, well, every dodge, as well as every dog, will have its day. Prussic acid in ophthalmic practice, although attempted to be revived two years ago in Canada, has been defunct in England these six years. I was therefore not a little surprised to find in the *Medical Times*, for February 21, "Cases and Observations Illustrating the Therapeutic Efficacy of Diluted Hydrocyanic Acid as a Topical Application in certain Affections of the Eye." I said to myself, "Oh! here is something new. The prussic acid affair is again revived; possibly there may be something new or true in it." You may therefore imagine my surprise, when I discovered that the cases related occurred ten years ago, and that they did not pretend even to the novelty of those disposed of when the matter was first under discussion.

Three cases are related: let us analyse them. Two of them occurred in 1842; the third "several years ago." What a pity that this valuable remedy, and its "therapeutic efficacy," have been concealed from the public for so long! The first case is one of catarrhal ophthalmia of the right eye, for which "leeches, fomentations, and mercurial purgatives, constituted the treatment up to the evening of the" fourth day, "when, the inflammation being much subdued, two or three drops of diluted prussic acid (1 to 2) were applied to the conjunctival surface of the affected organ. It produced almost immediate soothing effects." So much for the sanitive efficacy of this remedy after local depletion, mercurial purgatives and fomentations, etc., had been employed.

The second case occurred in the same individual in 1843, but this time the sclerotic as well as the conjunctiva was affected. The patient applied the prussic acid himself, but found that, by its application, "his sufferings were much increased." The surgeon was again called in, when, most judiciously, his treatment "was strictly antiphlogistic;" but in what it consisted has not been specified. If, however, the surgeon thought it necessary to leech, foment, and give mercurial purgatives in the case of catarrhal ophthalmia, we must suppose that his efforts were fully as energetic in the sclerotic affection. Well, "when the inflammation and attendant symptoms were much lessened, the drops of dilute prussic acid were applied to the eye, and there resulted a delightfully soothing sensation." I refrain from occupying your space with any observations on the Author's remarks with respect to the "calmative" properties of this anodyne, because I greatly fear they might not be fully understood or appreciated by an ophthalmic writer who speaks of "the transparency of the cornea, *or iris*, or both." The two previous cases having occurred in the same individual, are looked upon as one.

We now come to a case of "rheumatic uphthalmia, corneitis (and iritis?)" We read, that "the patient had been under treatment at a public institution for more than three weeks. The application of leeches, seclusion in a darkened and warm room, with the exhibition of calomel in combination with Dover's powder, to the extent of slight ptyalism, subdued in the course of ten days the acuteness of the inflammation. The mercury was now given in alterative doses, and two grains of quinine were taken three times a day. Belladonna rubbed into the brow." Very wise, very judicious and scientific, it must be acknowledged by all who are capable of forming a correct opinion upon the subject, was the treatment adopted at the public Institution. If we have any fault to find, it is that the belladonna, or its alkaloid atropine, were not employed sooner. But possibly they were; we require the evidence of the surgeons of the Institution upon this subject. Now, what happens? The hydrocyanic acid doctor finds the man upon the fourteenth day with "trivial zonular, circumcorneal redness, a thin opacity of the cornea, iris bright (query, transparent?) eye very irritable to light; epiphora." To alleviate this state of things, prussic acid and wine of opium were applied, "and the symptoms gradually subsided."

The third case is one of syphilitic iritis, in a patient in the King's Norton Workhouse, in June, 1842. The woman was under treatment for a syphilitic eruption on the skin; but the exciting cause was said to be cold. "The treatment consisted"—and most properly—"of hot fomentations to the affected eye and temple; the more frequent exhibition of mercury; and, when slight ptyalism was apparent, a blister was placed on the back of the neck, and extract of belladonna rubbed into the brow." Now, let us hear the sequel. "Under this treatment, with low diet and confinement to bed, the sclerotic redness disappeared, and the lymph tubercles were gradually absorbed." What more could medicine achieve? Oh, yes! we learn that on her discharge from the sick ward, "the eye was dim and watery, for which I directed a few drops of prussic acid," etc. etc. etc.

Now, Sir, in the middle of the nineteenth century, with ophthalmic surgery in its present high state of perfection; with the facility of diagnosing ophthalmic diseases; with works such as those of Mackenzie, Lawrence, Middlemore, Tyrell, and Wharton Jones, and graphic illustrations like those in the great work of Dalrymple accessible to every medical practitioner; and with institutions such as London and several other cities in the United Kingdom afford for studying ophthalmic surgery; to speak of an eye being "dim and watery," without stating where the dimness was situated, and from what cause the epiphora proceeded, is beneath the present state of art.

O MI-HI.

FRACTURE OF NECK OF THE HUMERUS.

[To the Editor of the Medical Times and Gazette.]

Sir,—I venture to offer some remarks on a case of interest reported in the *Medical Times and Gazette* of February 14, by Mr. Hewett, of Bradford, Yorkshire.

It is described as Fracture of the Surgical Neck of the Humerus complicated with Dislocation; and it is added, that, in addition to

union of the broken bone, the dislocation was reduced easily soon after the accident.

To those of your readers who are experienced or well-read in surgical literature, I submit that such a statement must appear highly improbable; and with no feeling of disrespect, I invite your correspondent to review what occurred, and give the case a more careful consideration.

Fracture of the neck of the humerus, combined with dislocation, is fortunately a rare accident. I believe that in such cases the dislocation is invariably forwards under the pectoral muscle, and I know that it has generally, if not uniformly, been found incapable of reduction at the time of its first occurrence, while extension made on the united humerus after some weeks, has, in my own experience, resulted in disunion of the fracture without reduction of the dislocation.

That reduction soon after the accident should be found impracticable, is hardly surprising, when it is borne in mind, that the head of the bone, separated from the shaft, forms part of an irregular globe about an inch and a half in diameter, covered by bulky muscles, presenting nothing that can be distinctly seized or extended, and forming altogether a most unfavourable object for manipulation or operative proceedings of any kind.

I have, in truth, a strong persuasion that your correspondent has made some mistake in diagnosis, and invite him to explain himself more clearly as to the signs and treatment of the accident he has described. I am, &c. AN HOSPITAL SURGEON.

LARGE DOSES OF ARSENIC.

[To the Editor of the Medical Times and Gazette.]

SIR,—Two communications have appeared in your Journal, in answer to mine of Jan. 20—one from "Cosmopolite," the other from Dr. Everett. I hesitated until now whether or not they required an answer; and, although I admit that I see no very great utility to be derived from it, still I would beg a space for a short note.

My whole and sole motive in first trespassing on your time, was the "elucidation of truth;" and, as my report was based merely on the newspaper correspondent (from which the case was copied), I thought it might have been in some measure mis-stated. I hardly imagined my note would have called forth two replies so quickly; and I cannot but thank your correspondents for adding to my store of knowledge in these cases; still, I confess, the words "sarcastically scrupulous," "incredulity," "scepticism," etc., might have been omitted, for these expressions of my opinions are gratuitous on their parts. I doubt not for a moment the truth of either case reported by these gentlemen, and therefore shall not think of questioning their veracity by seeking to know more. Cases of poisoning by "large" and "considerable" doses of arsenic are mentioned in the French journals, (in the year 1847, I think,) with recovery; also in the *Lancet* (Jan. 13, 1849) two cases are mentioned, where one ounce was swallowed, with recovery; also in one of the American journals is a case of a labourer who took nearly a scruple, and recovered; and I doubt not many other cases might be added. But, still, I have not yet met with a similar case to the one mentioned by me.

"Cosmopolite's" case was very different, because the dose was "half an ounce," not 15 grains—the patient a woman, not a boy of 5 years of age; she took it "mixed with butter, and then enclosed in a roll of bread;" the boy took it when it was merely spread or (as is usual and may be more correctly written) sprinkled on a slice of bread and butter—not mixed and then enclosed. In Dr. Everett's case, the similarity certainly is much greater; but there the age was more than double—the bread and butter was doubled; consequently, like "Cosmopolite's" case, the arsenic was much more entangled; and, moreover, Dr. Everett's patient had not long previous taken a meal, which, as he states, doubtless rendered the recovery more perfect; and another point must not be overlooked, and that is, an "emetic" was almost immediately administered. I am sorry to have occupied so much of your valuable Journal, but I have now done, and have to thank you for your previous courtesy.

As I have no wish to intrude my name before the whole medical world, I shall still keep to my former signature.

I am, &c. DEVIZES.

DR. FOLEY'S CASE OF GESTATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the *Medical Times and Gazette* of January 31, a case of what is termed remarkable gestation, is narrated by Dr. Foley, who seems to fancy it to be one of double conception, producing first a mole, and subsequently a living child; though, as far as one may judge from the imperfect account afforded, I should be inclined to adopt a very different and much more simple version of the matter. The patient met with an accident during the third month of pregnancy, and miscarriage was threatened, owing probably to some separation of the membranes, and perhaps of the placenta, to some small extent. Hæmorrhage ensued abundantly, but was restrained by appropriate medical treatment. The bleeding, doubtless, ceased slowly, giving time for a clot to form in the upper part of the vagina, which, in a mother of seven children, was not unlikely to be somewhat capacious, and even to form a kind of *cul-de-sac*. By there resting some hours, and the more fluid part being gradually drained away, this clot doubtless became more fibrinous, and was moulded into an ovate form, presenting a fleshy character, (we have no evidence that it was organised except Dr. Foley's assumption); this mass was discharged *per se*, and for a few days some discharge of partially decomposed blood continued. Then the pregnancy went on in due course, and at the end of about nine months from the computed period of conception, and six months after the appearance of Dr. Foley's "*mole*," a living child was brought forth, which, though "small and weakly," was apparently recognised as possibly at the full period of utero-gestation; that it should be small and weakly is not to be wondered at, after the mischief which took place at the third month of the pregnancy; or we may even take sufficient margin to suppose that the child's uterine existence had not exceeded eight months, if that would better agree with the appearance of its physical organisation. Thus the case which is related does not seem to me to have any legitimate bearing on the questions "as to double conception;" or, supposing that to occur, as to "whether one ovum may be cast off while the other is retained." I am, &c. B. L.

THE SPECULUM.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am a practitioner of thirty years' standing, and may, therefore, claim some familiarity with disease and its treatment. I have used the speculum myself, but consider it empirical and a violation of decency to do so, unless previous means have failed. I full well know it is practised by many to rise above their fellows, and get money without any other valid reasons; and I believe young girls, and many women, may be as easily cajoled in this way as the other sex by the numerous Doctors Solomon and their Balms of Gilead. A case of this kind came under my notice. I examined for myself with the speculum, and inquired into the case, and the conclusion I came to was, that she had suffered from leucorrhœa, which was changed to a more active form by the speculum and caustic; the vaginal membrane being very red, and pouring forth an abundant catarrh. Another case recently fell under my notice, in which I think the interference of a new and busy speculum-monger in my neighbourhood did more harm than good. I attended a woman for menorrhagia; she had great pain, and was weak from loss of blood; this had been her state for some time at this period. Under the recumbent position, opiates, mineral acids, alum and other injections, blisters on the sacrum, and proper sustenance, the woman became much better, and was able to get about; but she had heard of the great speculum doctor, and became his patient. She did not live many months to attest his superior skill, but died to leave it in doubt, and I cannot help thinking if she had been without this panacea pudendo, she would have fared quite as well. I think we may honestly contend that, in most cases in which the speculum is used, a scrutiny of the local symptoms, of the general health, and an examination *per digitum* if seemingly required, is all sufficient, and that poking specula into women on every such occasion is vicious and mischievous, by hurting and exciting parts already too much so affected.

I am, &c. A COUNTRY SUBSCRIBER.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. HODGSON, Esq., F.R.S., President, in the Chair.

CASE OF SCIRRHUS OF THE RECTUM; FORMATION OF AN ARTIFICIAL ANUS.

BY JOHN ADAMS, Esq., Surgeon to the London Hospital.

The patient was a lady, 35 years of age, the mother of children. She had for a considerable time complained of great difficulty in

passing her motions. This was accomplished with pain and much straining, and she was the subject of hæmorrhoids. She was hereditarily predisposed to cancer. About a year ago, a surgeon pronounced her case one of cancer of the rectum, with ulceration. The bowels were constipated nine days, and the usual purgatives were administered, and scruple doses of calomel, without effect. Her sickness was allayed by opium and by sucking ice. The rectum-tube could not be passed above four inches. Scirrhous rectum, very high up, was presumed to be the cause of the obstruction. Metallic mercury, to the extent of two pounds, was given, a small quantity of which passed soon after. The operation was performed according to Mr. Luke's method, (see his case in the last Volume of the Society's "Transactions.") The descending colon and sigmoid flexure were undistended. In the course of a few hours, a large quantity of fluid fæces passed, and the relief was complete. She continued to progress favourably, and since the operation, has been better than she has been for some years. Occasionally a small quantity of fæces pass per anum, but it is nearly all discharged by the wound; there is also occasionally a small quantity of bloody mucus passing per anum. A light truss is used to restrain the constant passage of the fæces, and there is a distinct tendency to pass them twice daily. A large quantity of the mercury passed by the wound soon after the operation, but a very considerable quantity was retained until a short time ago, and it then passed per anum. The patient was slightly salivated, apparently from the calomel, the mercury passing unaltered.

AN ACCOUNT OF TWO CASES OF INTESTINAL OBSTRUCTION,

IN WHICH THE OPERATION FOR THE FORMATION OF AN ARTIFICIAL ANUS WAS PERFORMED; ONE IN THE ASCENDING, THE OTHER IN THE DESCENDING, COLON.

By W. J. CLEMENT, Esq., F.R.C.S., Shrewsbury.

Case 1.—The author visited, on the 8th of October, 1841, a married woman, aged 47 years, who was suffering from obstruction of the bowels of fourteen days' duration, accompanied by great distension of the abdomen, hiccough, and incessant vomiting, which during the last two days had become fæcal; the countenance was anxious; the pulse small, rapid, and fluttering. It appeared that, for the previous seven or eight years, the patient had suffered from habitual constipation, and had required the constant use of drastic purgatives. The abdomen was everywhere tympanitic on percussion except on the right inguinal and iliac regions, where it was dull. It was evident, from the fact that several pints of fluid could be injected into the colon, that the obstruction was not in its descending portion. On the 10th, the symptoms having undergone no abatement, and the patient's state being evidently hopeless, unless relief could be obtained by operation, it was proposed by the author, and performed on the same day. The patient was placed on her belly; the incision was made midway between the last rib and the crest of the ilium, extending from close to the spinal column to a line cutting the anterior superior spinous process of the ilium perpendicularly. The colon was found to be distended. It was secured by a couple of ligatures passed through its coats; and, a vertical incision having been made into it, a large quantity of liquid fæces escaped, together with much flatus. Immediate relief was obtained; the unfavourable symptoms ceased; the fæces were passed more or less freely through the wound, and at the end of six weeks the patient was able to walk a mile. About this time the discharge through the artificial anus became gradually less; at the end of seven weeks vomiting and colicky pains returned, but ceased after the expulsion of a mass of plum-stones, when a free exit for the fæces was again established. The patient lived for more than three years after the operation, enjoying tolerable health, and able to walk a considerable distance, and to attend to her domestic affairs. Aperient medicines were taken regularly, and the passage of fæces was pretty free. Plum-stones were passed at intervals; the total number collected was 116. The patient's health declined for some months before her death, the appetite decreasing, the strength failing, and emaciation progressing. On examination, a very complete stricture was found to exist in the transverse colon, which would not admit even the passage of a bristle. It was about a quarter of an inch in length. The coats of the bowel at this point were of a dense, white, cartilaginous structure. The muscular coat of the cœcum and ascending colon was much thickened, and there was great distension of the gut behind the stricture. No traces of inflammatory action were to be found in the peritoneal cavity, with the exception of three membranous bands, which extended in a lateral direction, connecting the lower part of the ileum with the cœcum and ascending colon.

Case 2.—The driver of a mail coach, a stout, muscular man, aged 43, consulted the author in January, 1847, suffering from constipation and external piles. In the month of March, the constipation had become more obstinate, and the patient was obliged to give up his occupation. The symptoms were relieved by cupping on the loins, calomel, and other purgatives. On the 2nd of April, rigors, which had occurred once during the month of March, returned, and were followed by vomiting, which continued for two or three days. Examination of the rectum showed the existence of a stricture about six inches from the anus. The attempt to pass rectum bougies of the smallest size failed. An elastic gum urethra bougie passed the obstruction, and, upon withdrawing it, liquid fæces and flatus were voided. This operation caused great constitutional disturbance, rendering blood letting, leeches, and calomel and opium necessary. The discharge from the bowels was very slight; the vomiting recurred frequently. On the 12th of May, three small fleshy bodies, with a little fæculent matter, were voided. No fæces passed from the rectum subsequently. During the remainder of the month of May, the patient suffered greatly from hiccough, vomiting, and most troublesome tenesmus. On the 30th, the formation of an artificial anus was proposed, but declined by the patient. On the 18th June, fæculent vomiting began, and returned on the 20th, and the patient then consented to have the operation performed. Examination of the rectum with the finger had given evidence of a morbid growth within the rectum, which was increasing in bulk. The operation was performed on the 20th of June. No fæculent matter having passed the rectum since the 12th of May, the abdomen was enormously distended. The incision was made on the left side, in the same direction as in the former case, but of greater extent. The bowel was secured by ligatures, and a free incision made into it, but nothing but flatus escaped. As moderate pressure over the abdomen had no effect in causing a discharge of fæces, the patient was placed in bed on his left side. The vomiting and hiccough continued; about eight hours after the operation an immense discharge of liquid fæcal matter took place, with some abatement of the symptoms. The author gives a detailed report of the patient's state during seven days following the operation, during which there was considerable constitutional irritation, with much tenderness of abdomen, and retention of urine. The catheter was passed repeatedly, but the secretion of urine was very scanty, the fæcal discharge continuing more or less constant and copious. At the end of the week the improvement was very decided, and continued for ten days—viz., until July 8th, when acute pain in the left side of the abdomen, and rigors occurred, followed by enlargement of the glands in both groins; and sloughing of the skin over the sacrum and right hip, which had begun four days after the operation, but subsequently had appeared likely to cease, began again to extend itself, in spite of the partial removal of pressure by means of the water-bed, etc. It was found, on examination, that the morbid growth occupying the rectum had increased very much, and it was evident that the difficulty attending the emptying the bladder, was caused by its pressure. A tumour projected through the sphincter ani a few days before the patient's death, and bled on being touched. The enlarged glands in both groins continued to increase in size, and the skin in the left groin began to ulcerate. Death occurred on the 26th of July. No examination of the body took place.

A CASE OF INTESTINAL OBSTRUCTION, FROM DISEASE OF THE RECTUM, TREATED SUCCESSFULLY BY OPENING THE DESCENDING COLON IN THE LEFT GROIN.

By ALFRED BAKER, Esq., Surgeon to the General Hospital, Birmingham.

[Communicated by the PRESIDENT.]

On the 15th of August, 1849, the author was called to visit Mrs. T., aged 62, who was suffering from severe pain in the umbilical and hypogastric regions, with retching and vomiting, fulness in the abdomen, flatulence, and constipation. The symptoms were at first attributed to her having eaten indigestible food, and were treated with that view. The symptoms for the most part disappeared, but the pain continued from time to time. On the 1st of October she had a recurrence of the symptoms, not referrible to any obvious cause; and again on the 11th. On the 9th of November the author was summoned to her, and found many of the signs of intestinal obstruction present; and within reach of the tip of the finger, the rectum was found obstructed by a firm growth, occupying its whole circumference. Attempts were made for a few days, and with partial success, to unload the bowels by passing a small œsophagus-tube into the stricture, by injections and the use of purgative medicines. In a few days, however, constipation returned, and with symptoms of peritonitis. These symptoms were subdued, and diarrhœa came on; but this ceased spontaneously, and constipation returned, and increased gradually; and on the 17th of January, 1850, perfect obstruction took place. On the 23rd, the symptoms were so urgent, that an operation was proposed and assented to. The descending colon was

opened in the left lumbar region, an incision being made transversely across the left loin for five inches. After the division of the muscles and fascia, the quantity of fat which presented itself was so great, that it was necessary to cut away part of it. The intestine was attached by four sutures to the skin before opening it. The opening was followed by the escape of a large quantity of semi-liquid fæces. The daily reports of the state of the patient after the operation are given by the author. She went on favourably; and on the 18th of April, it is reported that she got up – three weeks after the operation; that her general health was good; and that she had gained flesh. The lumbar opening was large enough to admit the index-finger, and the motions passed easily through it. She wore an ivory plug, attached to a padded steel plate, fastened by a belt; but, after a time, the plate was found inconvenient, and the plug was attached simply to a plate of vulcanized India-rubber. Up to this time, she has remained free from symptoms of intestinal obstruction; but, within the last few months has been attacked with symptoms which indicate that the morbid growth in the pelvis has extended to the abdomen. The author then gives his reasons for preferring the operation in the loin, in this case, to that proposed by Littrè, which were —1st. That there was less risk of rekindling inflammation of the peritonæum. 2nd. That the presence of femoral hernia which existed in this case might have given rise to displacement and adhesion of the intestines, so as to interfere with the finding of the large intestine, in an operation at the groin. 3rd. That as the point of obstruction was ascertained, there was no need of any exploratory incision; and he then points out the general advantages of the operation selected. In commenting on the operation at the loin, the author adverts to the fact, that the appearance of the anterior layer of the lumbar fascia may induce the supposition that the intestine is arrived at, as it has at times a bluish-green colour, and looks like intestine. But the longitudinal fibres which characterise the large intestine will not be seen; and, on making a careful puncture of the fascia, a protrusion of loose renal fat will take place; and until this fat has been reached, the operator may be sure that he has not arrived at the bowel. In speaking of the tendency which always exists, after these and all similar operations, to contraction of the cicatrix, the author expresses his belief that this tendency, in the present case, was materially lessened by the habitual use of the plug, which, he says, was a great comfort to the patient, as it enabled her to go about, and mix with the world, without the fear of the accidental escape of the contents of the bowel; and he adds, that the patient was able herself to adjust the apparatus, and attend to the evacuations and to the dressing of the wound, without requiring the aid of any second person.

A CASE OF INTESTINAL OBSTRUCTION.

By J. LUKE, Esq., Vice-President of the Royal College of Surgeons, and Surgeon to the London Hospital.

A blacksmith, aged 30, was admitted into the hospital on the 16th December, 1851, under Dr. Pereira, complaining of rheumatic pains in the hips and knees, and with a history of having suffered from rheumatic fever seven years since. It was found, moreover, that there had been no passage through his bowels for five days, that the abdomen was tympanitic, very painful and tender to the touch, and that there was vomiting of all food and drink. The last motion passed had been a copious one. There was inguinal hernia on the left side, reducible. The usual means were employed for four days after his admission, without any abatement of the symptoms taking place. On the third day, the vomiting became fæcal. A stomach-pump tube introduced into the rectum, met with obstruction at four or five inches from the anus. The secretion of urine was plentiful; the pulse ranged from 80 to 90; soft and compressible. On the fourth day after admission, a consultation was held, when it was agreed that the seat of obstruction was probably in the upper part of the rectum or at the sigmoid flexure of the colon. Owing to some abatement of the symptoms this day, the operation was not determined upon. The next day, another consultation took place, and the patient's state having become worse in the interim, the operation was determined upon, and performed by the author. A perpendicular incision, about two inches long, was made above Poupart's ligament, on the outside of the course of the epigastric artery. The incision through the peritoneum was about an inch long, through which the finger being introduced, it was found that the portion of the rectum within reach of the sigmoid flexure, and the descending colon above it, was contracted and healthy. The small intestines were distended, and a portion of them, on being drawn through the aperture, was found to be discoloured. The incision was enlarged to the extent of three inches, and a careful exploration was made, but without discovering the seat of stricture. The patient becoming exhausted, the wound was closed, and he was sent back to bed with an opiate, which was ordered to be repeated at intervals, if necessary. The symptoms of obstruction increased, the pulse became accelerated and more feeble, and the patient died on the fourth day after the operation. On examination, the small intestines were found to be much distended, and there were marks of recent but not very intense inflammation. The whole length of the colon was found to be empty and contracted; the cœcum contained a large lump of fæces. About four feet of small intestine above the valve were empty and contracted, beyond which there was a sudden distension of the gut. At this point the cause of the obstruction appeared to exist in a narrow band, which completely encircled the gut from one surface of mesentery to the other, and which was considered to be congenital. About three or four inches below the band there was a diverticulum three inches in length. Adhesions had taken place between the surfaces of the wound, and also between it and the omentum lying in contact with it.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. LATHAM, President, in the Chair.

Mr. Shaw presented a specimen of

ULCERATED CANCEROUS TUMOUR OF THE RIGHT ANTERIOR ARCH OF THE FAUCES,

taken from a female, aged 53, who was admitted into the Middlesex Hospital on the 25th of November, and died on the 9th of December. Being unaccompanied by friends, and the act of speaking giving pain, the history of the complaint was incomplete; but she stated that the disease in her throat had existed for a year. A smooth, glossy tumour, of a pale-red colour, of firm consistence, and about the size of a large walnut, occupied the space between the posterior half of the palate on the right side, and the back part of the side of the tongue, on which it pressed. Several lymphatic glands under the ear were enlarged, hard, and moveable. She hawked up during the day a considerable quantity of dirty, greyish matter, mixed with mucus and saliva. In sleeping, she required to be in the sitting posture; she preferred soft, pultaceous food, as being most easily swallowed; she was greatly emaciated. Her abdomen was large; but, as she complained only of pain in her right side, the state of the abdominal viscera was not particularly examined. She died with symptoms of pleurisy. On examining the throat, the tumour was found inseparably connected with the hard and soft palate, from the outside to near the uvula. In front, the surface was entire; but towards the median line, and posteriorly, there was extensive ulceration. One border of the ulcer reached downwards to the back of the tongue, while the other descended more backwards, and further down, to the superior aperture of the larynx, by the side of the epiglottis. The tonsil, which was sound, was seen behind. The base of the ulcer, as well as the indurated and enlarged cervical glands, were distinctly of cancerous structure. In the mucous membrane of the upper part of the trachea, a few small cancerous tubercles were observed. Both lungs were studded throughout their greater part with cancerous tumours, varying from the size of a hazel-nut to that of a chestnut, and in some places running into each other. Near the œsophageal end of the stomach, three or four cancerous tubercles, of the size of split almonds, adhered to the smaller omentum. Nowhere else were cancerous tumours found. There were signs of recent inflammation of the pleura on the right side. The spleen was greatly enlarged, extending from the highest part of the right hypochondrium to Poupart's ligament, and it weighed four pounds twelve ounces.

Dr. Hare exhibited a specimen of

HYPERTROPHY OF THE SPLEEN.—CRYSTALS IN THE SUBSTANCE OF THE SPLEEN; (SPLENIC MURMUR).—ULCERATION OF THE COLON.

The individual from whom the specimens were removed was a male, aged 56, porter to an upholsterer, and of regular habits; he had a rather large scrotal hernia. He consulted Dr. Hare in Oct., 1850, in consequence of having passed six small calculi during the preceding week. For three years before, he had at times observed that the urine was of a high colour, and deposited a dark orange-red coloured sediment, but never previously had he voided any calculi; those passed consisted of lithic acid. For two years previously, each summer and winter, he had suffered from diarrhœa, and he had only been free from an attack of it about a week before his visit. He took liquor potassæ. For some time he passed considerable numbers of minute lithic acid calculi, with lithic acid gravel; afterwards lithate of ammonia, in the form of small calculi; and, lastly, had only an amorphous deposit of lithate of ammonia

in the urine. It was several times tested for the presence of albumen, but none was at any time during the whole of his illness found in it. About the beginning of February, 1851, he first observed his ankles swollen, which, except for short periods, they continued to be more or less afterwards. About the commencement of June, he felt a sensation of fulness or tightness in the abdomen; he had experienced a similar sensation about a month previously; at first he had felt it about the epigastrium, but since then he had experienced it more and more, and lower down in the abdomen; at the time he mentioned it, the sensation of fulness was referred principally to the umbilical region. On examining the abdomen, it was found to be prominent, rather barrel shaped; most prominent at the level of the umbilicus; the right side was less tense than the left, and moved rather more during respiration: it was moderately tympanitic on percussion; but the left side, from the level of the costal cartilages to the level of the crista ilii and forwards to the umbilicus, was dull and resisting, and a little painful on percussion, as was also the left postero-lumbar region. He had never had ague, nor lived in a marshy district. A blister and some other remedies relieved him of the pain, and he suffered very little from this during the rest of his illness. He gradually became somewhat thinner, and his complexion paler, but the tumour did not appear to alter very materially in size or character. About the end of September, he had become decidedly weaker, and, though he occasionally went out, he remained for the most part in bed; he had been occasionally relaxed, and his feet had become more swollen, but there was no œdema of other parts of the body; he was thinner; his complexion had assumed a light olive tinge, with a shade of yellow, more marked in face than elsewhere; thirsty, felt parched; appetite not very good; urine still generally contained some lithic acid or lithates, but in much smaller quantity than before. By percussion and palpation, the extent of the tumour and its outline could be pretty accurately made out; its right border passed from under margins of costal cartilages at a point an inch and a half to the left of ensiform cartilage, and thence, inclining to the right, extended downwards (passing about half an inch to right of umbilicus) to a point about an inch below the level of crista ilii; hence the edge of the tumour inclined downwards and to the left till within two and a half inches of the symphysis pubis, where it turned to the left, and was lost in iliac fossa at about an inch below anterior superior spinous process; this border of the tumour was deeply notched at two points, the one a little above, and the other a little below the umbilicus. On pressing in the left lumbar region, at about four inches from the spine, a sharp edge of the tumour was also perceptible. The tumour was dull on percussion, and did not pulsate, but over the whole of it a distinct blowing murmur ("splenic murmur") was audible, somewhat rough in character, and most marked at the right border of the tumour about one and a half inch below the level of ensiform cartilage. As he became thinner the edge of the tumour became more distinct, but the tumour itself appeared to remain undiminished in size till Dec. 7th,—two days before his death; it was then certainly somewhat smaller, but must have diminished most remarkably during the next two days, for the alteration not only attracted the attention of those who waited upon him, but when Dr. Hare saw him after death, the abdomen had become of a shape altogether different from what it had been during any period when he had previously seen him. For two or three weeks he had had considerable and uncontrollable diarrhœa, which, towards the last, became excessive, and was the immediate cause of his death.

Post-Mortem Examination 62 Hours after Death.—Body a good deal emaciated; marked œdema of both feet and ankles, a little of the upper parts of the legs. Moderate emphysema of whole of both lungs; a few only of the vesicles were the size of hemp seed. Heart presented nothing unusual. The abdomen, instead of being full and prominent as formerly, sank inwards from the cartilages of the ribs, so as to present from above downwards—from the ribs to the symphysis pubis—somewhat of a concavity. A large portion of the lower part of left side of the abdomen, which had formerly been occupied by the tumour, was now resonant on percussion, while the tumour itself—the position of which could no longer be detected by the eye—was to be felt occupying only the upper and outer part of left side. The omentum was opaque, thickened, and the lower end of it alone formed the scrotal hernia, no intestine being contained in it. The mucous membrane of the colon was of a palish ash-grey colour; throughout its whole extent there were ulcerations, most of them varying in size from hemp seed to split-pea; the margins very little, and, for the most part, not at all elevated; but the ulcerations rather presented the appearance of portions of the mucous membrane punched out, while the bottom of the ulcerations had a reticulated appearance; the ulcerations were rather more numerous in and near the caput coli than elsewhere. The liver was very much elongated, especially its left lobe; for, while the right lobe measured only six and a half inches transversely, the left one measured eight and a half inches; this was due, doubtless, to adhesion by false membrane having taken place between the under surface of the left lobe of the liver and the top of the spleen, so that the former had been thus singularly stretched by the enlargement of the latter. The spleen, though very much smaller than it had formerly been, measured ten inches in length, by five and an eighth in breadth, and two and an eighth in thickness, its weight being rather more than two and three quarter pounds; its surface was somewhat wrinkled, and at its upper part (about an inch from the top) there was a deep furrow, where a portion of the organ was doubled on the part below; its anterior edge was distinctly notched; at its upper extremity, besides its adhesions to the under surface of the liver, there were a few patches of old false membrane on its surface. Near the hilus there was a small lien succenturiatus, about the size of a pea. On section, the spleen was of a darkish red, with a purplish tint, and moderately firm under pressure. Kidneys healthy, except that some of the apices of the cones contained lithic acid. Dr. Sieveking examined a portion of the spleen under the microscope, and found it to be chiefly composed of granular matter; he also discovered some crystals interspersed among the granular matter, and found that they were dissolved by acetic acid. Dr. Hare also subsequently saw them in another portion of the spleen; they were irregular in shape, though some approached a rhomboidal form, were colourless, and the largest of them were from three to five times the diameter of a blood-disc in size.

Dr. Bristowe gave the details of a case (illustrated by specimens) of

SUPPURATIVE PERITONITIS, THE RESULT OF ABSCESS OF THE LIVER, CAUSING PERFORATION OF THE INTESTINE AND OF THE ABDOMINAL PARIETES.

W. S., a painter, aged 29. The body was anæmic, but not emaciated; there was a small oval ulcerated opening about an inch below the umbilicus. On opening the abdomen, a large quantity of thin, yellowish, somewhat offensive pus escaped from a cavity occupying its upper and anterior part. This was bounded in front by the parietes, above by the diaphragm, below by the transverse colon and great omentum, which were firmly adherent to the abdominal walls, behind by the stomach, spleen, and left lobe of the liver, and to the right by structures, afterwards to be noticed. The surfaces of the organs, forming the boundaries of this cavity, were not thickened or otherwise altered in structure. The firm adhesions existing between the colon and the parietes were found to be due to an irregular network of cellular tissue infiltrated with pus which lay between them, and was, in fact, altered omentum. At this part sinuses had formed in the muscular tissue of the parietes, communicating with the external opening; and the colon on pressure allowed a small quantity of gas and fluid to escape, being apparently similarly perforated. A coil of small intestine lay close beneath the colon, and was partly adherent to it and to the parietes in front by means of the same reticulated layer. The small intestines, which lay chiefly to the left side, were attached to one another by numerous adhesions, mostly healthy, and of tolerably recent formation; in some parts filamentous, in others membranous, and containing in their interstices clear, yellow serum. In one or two places, however, between them and the parietes were abscesses containing thick pus, separated by adhesions from the surrounding parts. On tearing the adhesions that existed to the right of the cavity before mentioned, a second one was opened, which was filled with a large quantity of thick, greenish-brown, stinking pus, having somewhat of a fæcal odour. This cavity was limited in front and to the right by the parietes and ascending colon, above by the under surface of the right lobe of the liver, near the free edge of which was an irregular, ulcerated opening, communicating with an abscess in its interior, and to the left by adhesions and thickening of the suspensory ligament, gall-bladder, small omentum, and colon, the right upper angle of which was considerably depressed by the accumulation of pus from above; it also extended behind the stomach through the foramen of Winslow into the sac of the great omentum, and through this channel communicated, in the situation before mentioned, with the perforations in the colon and abdominal walls. Similar changes were found to have occurred in the neighbourhood of the cœcum; accumulations of pus had formed between it and the iliacus, causing sinuses in the muscle, and perforation of the gut. The walls of this cavity were much thickened throughout. The liver was somewhat increased in size; the entire surface of its left lobe (which projected into the first cavity) was smooth and polished; while that of the right was thickened throughout, forming by its lower surface the upper boundary of

the second cavity, and by its upper adhering to the diaphragm by firm membranous adhesions. In the middle of the anterior third of this lobe was an abscess, about as large as a hen's egg, irregular in shape, surrounded by a soft, opaque, yellowish substance, half a line in thickness, and opening into the cavity below by a sinuous, ulcerated opening about a square inch in area. The liver-structure, in the neighbourhood of the abscess, was altered, and presented several small circumscribed abscesses. The remainder of the organ was healthy. Near the centre of the anterior part of the transverse colon, the mucous membrane presented several flat, roundish elevations, from a quarter to two-thirds of an inch in diameter; they were soft and fluctuating to the touch, and two or three were perforated by minute orifices, whence pus exuded on the application of pressure. All these elevations were the result of the accumulation of pus between the mucous and muscular coats, the latter being perforated from without by one or more (in most instances) distinct openings. On the right side of the cœcum were four or five more of these perforations; they were larger than those in the colon, and in all the mucous membrane had become ulcerated; they presented, however, the same characters. The mucous membrane was undermined to a considerable extent around the ulcerated openings, and the muscular tissue beneath was seen to be perforated, by which means communications were established between the cœcum and the peritoneal abscess. The large intestine contained only a few small lumps of solid fæcal matter, but was filled with pus exactly resembling that found in the cavity communicating with it. That part of the small intestine which adhered to the colon presented accumulations of pus between its mucous and muscular coats, but was not perforated. The posterior peritoneal surface of the stomach was thickened, but in all other respects the intestinal canal was healthy. The remains of old tubercle were found at the apex of each lung, and a slight degree of recent pleuritis at the lower part of each pleural cavity. The left common, internal and external iliac veins were filled by an adherent coagulum, partly decolorised, and softened internally into a puriform fluid. The corresponding lower extremity was natural. A similar clot was found in the vena azygos, occupying about three inches of its length; no other organ presented anything worthy of notice. The history of the case is not satisfactory. About seven months before death he suffered from dyspeptic symptoms, with a sense of weight and oppression in the epigastrium. These yielded to treatment, and about three months afterwards he first complained of pain in the right hypochondrium and between the shoulders. Six weeks before his death this had disappeared; he was then in a hectic state, weak, pallid, and with occasional sweats; two or three weeks after this profuse diarrhœa came on, and in a week or two more, or three weeks before his death, an opening formed near the umbilicus, which discharged copiously offensive pus; these discharges continued up to the time of death, but the nature of those evacuated per anum was never carefully examined. The abdomen at no time appeared distended, nor while under observation did he complain of pain in it; latterly, however, he had a little tenderness about the groins, and some pain in breathing; the presence of pleuritis serves to explain the latter symptom. In this case, the primary disease appears to have been abscess of the liver. This has opened into the peritonæum, causing universal peritonitis; which, in the neighbourhood of the abscess, owing to the continual irritation kept up by it, has assumed a suppurative form, and become localised by adhesions. The pus accumulating in the cavity thus formed, has subsequently caused ulceration and perforation of its parietes at certain points. The mode of procedure in the case of the intestines appears to have been the following:—A muscular coat has first been perforated, and then a collection of pus has formed between it and the mucous coat; which latter, after a time, has given way. The different stages were well marked in the preparations exhibited.

MEDICAL SOCIETY OF LONDON.

Dr. Murphy, President, in the Chair.

COINCIDENCE OF VACCINIA AND VARIOLA.

Mr. Foote observed, that, at a late meeting of the Society, Dr. Camps brought forward a case in which vaccinia and variola ran their course simultaneously, and he stated that he had never met with a similar example. At that time he had under his care a little girl, 3 years old, vaccinated successfully in her fifth month, in whom small-pox had lately fully developed itself. As a measure of precaution, he re-vaccinated the parents and an aunt, who was residing with them. He also vaccinated the brother of his patient, an infant about 4 months old. In none of these, save the mother, was the operation effectual, but in her the re-vaccination had its full influence. When this was quite ripe, Mr. Foote re-operated on the infant, which was then apparently in good health. Soon afterwards, the indications that the operation was about to be serviceable were remarked, but, at the same time, symptoms of small-pox also manifested themselves. For a while the congener diseases ran their course together, but the vaccine malady soon after diminished in intensity for two or three days, until the pustules of the other eruptive disease began to disappear. The vaccine vesicle then resumed its former activity, and, on the 21st of February, a fine, fully formed vaccine vesicle, apparently in the highest state of perfection, could be seen on the child's arm. In another instance, where a male child, of the same age as the previous patient, was affected with virulent small-pox, Mr. Foote re-vaccinated all the other members of the family, and likewise operated in a similar manner, for the first time, on an infant 5 months old. In none of these cases was the operation effectual, and the infant finally had small-pox, but in a mild or modified form.

SERRES-FINES IN SUPERFICIAL RUPTURE OF THE PERINÆUM.

Dr. Crisp showed a small instrument, called in France the *Serre-fine*, for the purpose of uniting the edges of wounds. Dr. Crisp thought that these pincers were scarcely known in this country, and he believed that they would be found most effectual in arresting the bleeding from leech-bites. He had tried them in one instance with immediate success. Dr. Deidier, of Montpellier, in the *Revue Thérapeutique du Midi*, January 15, 1852, has published a case of rupture of the perinæum during labour, treated successfully by these means; the rent extended through the cutaneo-mucous tissue and the constrictor vaginæ. Three *Serres-fines* were applied immediately after the laceration; the last was removed after forty-eight hours. The thighs were kept together, and the united surfaces carefully washed. On the sixth day the patient had a hard evacuation without deranging the parts, and on the ninth the wound was perfectly healed.

Mr. Hunt read the following case of

GENITAL MALFORMATION.

A lady, a native of Scotland, aged 30, of refined mind and feminine development, consulted him for stricture of the rectum. The meatus urinarius was more capacious than usual, and there was no vaginal aperture, the perinæum being continued from the anus to the meatus. The sphincter ani was very dilatable, but no trace of the fundus uteri or of ovaries could be felt *per rectum*. The os coccygis was attached at right angles to the sacrum, reducing considerably the distance between the former bone and the pubes. The clitoris and labia were normal, the mammæ well developed, and sexual feeling was admitted to exist, probably in its normal degree. She had of course never menstruated, nor had there been any vicarious discharge. Yet she suffered no periodical inconvenience, not enough, at least, to attract her notice. The pubertatic epoch occurred at the usual age; the general health was good. It was the opinion of Mr. Hunt and of another surgeon who examined the case, that the uterus and vagina certainly, and probably one or both ovaries, were wanting; yet the mature female development, both of mind and body, was otherwise perfect.

Dr. Murphy said, that the only case he then recollected at all similar to that Mr. Hunt had narrated, was that of a married lady, by whom he was consulted on account of the want of a family. In that instance, the commencement of the vagina existed, the canal terminating at the end of three inches in a cul-de-sac. There never had been any menstrual secretion, nor had he (Dr. Murphy) ever been able to ascertain the existence or the absence of the uterus.

Dr. Camps remarked, that probably these cases of the non-appearance of the menses were not so rare as had hitherto been supposed. He had himself been consulted within the past week by a widow lady, who had never menstruated; and had already published a similar case in the *Medical Gazette*.

FOREIGN BODY IN THE LARYNX.

Mr. B. W. Richardson exhibited to the Society a brass ring, an inch in diameter, and weighing 20 grs., which had lodged in the larynx of a child 2 years old, and had been removed by the operation of tracheotomy. The case occurred to Mr. Orton, of Harborough, Leicestershire, who, believing that some foreign body was in the trachea, consulted Mr. Wilson, (Surgeon to the Manchester Infirmary,) as to the propriety of opening the trachea. On the 10th of December the operation was performed. Two or three of the upper rings of the trachea were divided, and, on passing a probe into the larynx, it came upon a hard substance, which it easily pushed upwards. Mr. Wilson now passed a finger on to the larynx by the mouth, felt the substance, and extracted it with

curved forceps; it proved to be one of those rings used by cabinet-makers for fixing small handles to drawers. All the symptoms passed off directly after the operation; the wound soon healed, and the patient did well. Mr. Richardson thought that no other case could be found recorded in which so large a body had been retained for so long a time in the larynx of so young a child. Louis had given a case in which a child had a bean in the trachea for three days; and Pelletier had another, in which a button mould was removed from the larynx after lying there for six weeks; but, in Pelletier's case, the patient was a young man, and the button probably small. Lastly, the case afforded another testimony of the great value and safety of the operation of tracheotomy.

Dr. Sibson believed it to be an anatomical impossibility for this foreign body to descend below the ventricles of the larynx. The whistling sound might have been caused, he thought, by the air passing through the larynx, and escaping by the side of the piece of brass.

Dr. Snow read a paper on

THE CAUSE AND PREVENTION OF DEATH FROM CHLOROFORM.

He said, that, by inhaling too much of this agent, the sensibility might be so much diminished that the necessity for breathing was no longer felt, and the action of the heart became afterwards arrested for want of respiration. Under certain circumstances, also, chloroform stopped the motion of the heart by its direct influence. He had observed the manner of dying in numerous experiments on dogs, cats, and other animals, with the stethoscope applied to the chest, while the quantity of vapour of chloroform in the air they were breathing was known. When they were killed by breathing air containing from 3 to 5 per cent. of vapour, the inhalation lasted ten or fifteen minutes, and the breathing ceased about a minute before the action of the heart. In some instances, the animals made two or three gasping inspirations at the time when the action of the heart became inaudible; and, if the chloroform were withdrawn, these gasps had often the effect of restoring the animals. When the vapour was present to the extent of 8 per cent. or upwards in the air, the death of the animals was very sudden, and the breathing and action of the heart ceased together, except in a few instances, in which the respiration actually continued after the heart had ceased to beat. In all the accidents which had happened to the human subject, death had taken place by sudden syncope; and it was evident that the action of the heart had been paralysed by the effect of the vapour of chloroform present to the extent of not less than 8 or 10 per cent. in the air breathed by the patient within a minute before the accident. Dr. Snow enumerated the deaths which had occurred from the administration of chloroform; they amounted to eighteen. In sixteen of these cases, the agent had been exhibited on a handkerchief, or towel, or piece of lint; and in the remaining two, in which some form of inhaler had been employed, it was not used by a medical man. The subjects of those cases were in a better state of general health than the average of persons who require to inhale chloroform. None of them were children or old people. Only one was reduced to a state of debility; and the operations that were being performed, or were about to commence, were, with two or three exceptions, of a trifling nature. Chloroform was so powerful, that it required special means to ensure that its vapour should be well diluted with air; not for the purposes of respiration, but to prevent its acting with such rapidity that there should be no time to watch its effects, and to prevent its ever being present in the lungs in such quantity as to paralyse the heart, by overcharging a portion of the blood. There were two ways of ensuring the proper mixture of air with the vapour: the first and best was to employ undiluted chloroform with a suitable inhaler; the second was, to dilute the chloroform with an equal quantity of rectified spirit of wine before pouring it on a handkerchief or sponge,—for by this means the quantity of vapour which it would yield to the air would be diminished to within safe bounds. In cases of accidents from chloroform, he considered that the best means of preventing death was artificial respiration. From experiments which he had made on animals, he considered that, if it were performed within half a minute after the apparent death of the patient, it would in most cases be successful. He thought that the most safe and prompt method of performing it, in the human subject, would be to apply the mouth to the nostrils of the patient, and draw as much air as possible from the lungs, allowing them to be filled again by the elasticity of the ribs and atmospheric pressure. If this measure should not quickly succeed, he would recommend that the external jugular vein should be opened while the artificial respiration was still continued; for he had observed, in his experiments, that the right cavities of the heart became distended when its action failed, and that opening a vein near the heart improved the force and extent of any contractions which still continued. He had tried electricity on animals without much success.

Dr. Crisp said, he had paid much attention to the subject under discussion, and some time since had formed a table of 20 recorded deaths from chloroform. In 20 recorded deaths from chloroform, 12 were males, 7 females, and 1 a child, sex not named. *Ages*—Under 20, 6; between 20 and 30, 4; 30 and 40, 5; 40 and 50, 2; 3 age not stated. *Nature of Operation, or Motive for the Administration of the Chloroform*—Extraction of teeth, 4; removal of toe-nail, 3; amputation of thigh, 1; amputation of toe, 1; amputation of leg, 1; amputation of finger, 2; amputation of hand, 1; abscess of groin, 1; castration, 1; extirpation of the eye, 1; varicose tumour of the neck, 1; delirium tremens, 1; to procure sleep or pleasurable sensations, 2. Handkerchief, lint, or sponge, was used in 7 cases; the inhaler in 5, and in 8 the mode of administration is not known. *Death* was speedy, or momentary, in 11; from a few minutes to half an hour in 6; an hour and a-half, 1; not known, 2. The great majority were healthy individuals, free from important structural disease; in no instance was there a sufficient amount of disorganisation to account for death irrespective of the chloroform. The most usual morbid lesions in those examined were, fluid black blood in the right side of the heart, and congestion of the lungs. In 3 air was found in the veins. But the practical facts were, 1. That nearly all were young and healthy, and free from organic disease. 2nd. That in the majority of the cases two inhalations were employed, the first producing but little or no effect; the second being suddenly fatal, showing the cumulative property of chloroform, and the great source of danger in its administration. Dr. Snow, in his letter to the Lord Chief Justice of the Court of Queen's Bench, assumed that chloroform could not be used effectually for the purpose of robbery; he appeared to lose sight of the important fact, that persons who were robbed at night in the public thoroughfares were generally under the influence of alcohol: and, when in this condition, chloroform might easily be employed for the purpose of robbery.

Dr. Theophilus Thompson was anxious to extend the view taken, not merely as regarding the immediate danger to life in certain cases from the use of chloroform, but also so as to comprehend any change in the system from the peculiar effects of the drug at a longer or earlier period after its use. Many persons to whom this anæsthetic agent had been administered, have reported that they have not recovered their full powers of mind and body for weeks, and even for months, afterwards. The conviction of his (Dr. T. Thompson's) mind was, that in many instances some injurious action is caused by the inhalation, and that this imperatively demands investigation.

Mr. Bullock considered, that the bad effects attributed to the influence of chloroform, might, in many instances, be referred to the adulterations to which that drug is subject, and to the peculiar chemical properties of the spirit from which it is prepared. Chloroform is manufactured, not only from alcohol, but also from wood-spirit, and during its preparation from the latter article, a volatile oil is generated, which it is exceedingly difficult to separate from it, while its influence on the system is injurious. Sulphuric acid is also sometimes used in obtaining chloroform, which in that case may contain free chlorine, and prove inimical to health. When a perfectly pure chloroform has been used, he has seen patients kept under its influence for hours without any bad result.

Mr. Richardson said, that there were fatal cases from the use of chloroform to which neither Dr. Snow nor Dr. Crisp had alluded, and with which consequently he believed they were unacquainted. One of these had occurred lately at Bruges. A soldier, wounded in the hip, was about to be subjected to some operation, and for that purpose chloroform was administered; the man died. The cause of death was acknowledged by the surgeon in attendance, to be the bad mode in which he gave the drug, and not the peculiar action of the drug itself. He (Mr. Richardson) knew of two more cases in which the exhibition of chloroform had proved fatal; they had not been published, but he was aware of their having occurred. He could confirm many of Dr. Snow's observations. When animals had been killed by it, he had found that the red colour of the lungs was invariable, but those organs were not congested, neither was the brain; the liver was in a state of congestion, and the diaphragm was very contractile. Dr. Crisp and himself had experimented in some instances on animals with the drug, and had found that the right auricle of the heart, after the animal had been killed by it, contracted long after death. Death in man from the influence of chloroform was caused by syncope, but not so in the lower animals. He would wish to ask Dr. Snow whether he had found any difference in the action of sulphuric ether or of chloroform with respect to hard drinkers?

Mr. Barlow wished to offer a few observations, the results of his

limited experience. He thought the danger of administering chloroform on a handkerchief had been much overrated; it might be done safely, if there be not too much on it, and it be not held too near the mouth, nor too many persons near, providing always the case be well watched. He had never seen any danger where the iris did not dilate.

The President said, with reference to the employment of chloroform in obstetric cases, if we examined the question dispassionately, we should soon have our objections to its use in midwifery removed. Some people used it with as little caution as they did vinegar; but chloroform was a strong poison,—it had a definite action; and because, like other medicines, if carelessly given, it would kill, that was no argument against its use. He then referred to a table in the *British and Foreign Medico-Chirurgical Review*, of twenty-three cases of death from chloroform; it was remarkable in all these cases death had occurred in one or two minutes. In midwifery it was a most important agent. There was, however, no need of inducing unconsciousness; anæsthesia might always be produced, the patient remaining conscious all the time. The object is not to use it in all cases, but in those patients in whom from some morbid irritability the physiological labour-pains assume a pathological character, and then, without removing the entire pains, we may lull them in part with the greatest advantage. In regard to the impurities of chloroform, he (Dr. Murphy) had a very simple test. By rubbing a few drops on the palm of the hand, it left a fragrant odour: in no way pungent. Any pungent odour led him to suspect its purity.

Dr. Chowne was glad to see that a few years had wrought so healthy a change in the feelings of the Society about chloroform. All agreed now that it was a remedy to be used with great caution. In regard to midwifery, he had seen most disastrous consequences follow its administration, not only simple after consequences, but serious mental disorders.

Dr. Snow said, in reply, that he had excluded from his list of fatal cases certain alleged deaths from chloroform, which in his opinion were clearly due to other causes. The child mentioned by Dr. Crisp, for instance, died at Berlin, during the excision of a very large nævus. The operation lasted eighteen minutes. Only nine drops of chloroform were used altogether, and none was administered during the last eight minutes of the operation. In reply to Dr. Theophilus Thompson, he said, that he had not met with any unpleasant consequences attributable to chloroform except sickness, and in a very few cases hysteria, which latter might be caused by an operation without anæsthesia. If depression followed the long-continued use of chloroform, it should be removed by cordials and warmth to the surface.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 27th ult.:—

Bennett, Edwin, Dorchester.
Beales, Robert, Leicester.
Fitzhenry, Edward Henry, Liverpool.
Gornall, Richard Gregory, Newton Heath, Lancashire.
Julian, John Page, Little Blakenham, Suffolk.
Jessup, Walter, Cheltenham.
Lumsdaine, John, Hon. East India Company's Service.
Miles, Edwin Josiah, Gillingham, Dorset.
Norton, John, Kennington.
Pring, John, Bristol.
Sibley, Septimus William, Great Ormond-street.
Wilton, John Pleydell, Gloucester.
Welch, James Kemp, Christchurch, Hants.

At the same meeting of the Court, Messrs. Hart Gunlett and Charles Roberts passed their examiuations for Naval Surgeons. These gentlemen had previously been admitted members of the College, their diplomas bearing date respectively June 9, 1843, and March 29, 1844.

Her Majesty's Levees.—The following medical men were present at the late levees:—Sir B. Brodie, Sir J. Clark, Sir James Eyre, Dr. Billing, Dr. Forbes, Dr. W. H. Ashley, Dr. Locock, Dr. Holland, Dr. Twiss, Dr. Lloyd, Dr. Gillkrest, Professor Owen, and Mr. Erasmus Wilson. In the general circle, as it is termed, were Mr. Lawrence, Surgeon Extraordinary to the Queen; Mr. Fergusson, Surgeon to Prince Albert; Mr. Judd; Mr. Fisher, Surgeon-in-Chief to the Metropolitan Police; and Dr. Lyon Playfair, C.B., Gentleman Usher to H.R.H. Prince Albert, in Waiting. Dr. Ogle, Regius Professor of Medicine, University of Oxford, was presented to Her Majesty, on appointment, by Lord John Russell; also Dr. M'Dermott, R.N., by Sir W. Burnett; Dr. James Millar, by Lord Munster; and Mr. G. Saunders, by Mr. Herries.

Obituary.—Feb. 25th, at the North Dispensary, Liverpool, of typhus fever, caught in the assiduous discharge of his professional duties, Samuel Gibbons, Esq., assistant house-surgeon.

Military Appointments.—6th Dragoons, Surgeon Alexander M'Grigor, from the 71st Foot, to be surgeon, vice James Sidey, M.D., who retires upon half-pay. 38th Foot, Donald Sinclair Smith, gentleman, to be assistant-surgeon, vice Le Blanc, promoted on the Staff. 44th Foot, Staff-surgeon of the 2nd class William Kilner Swettenham, M.D., to be surgeon, vice Robertson, who exchanges. 71st Foot, Staff-surgeon of the 2nd class Geu. Douglas Dods, M.D., to be surgeon, vice M'Grigor, appointed to the 6th Dragoons. Hospital Staff, Surgeon Edward Robertson, M.D., from the 44th Foot, to be staff-surgeon of the 2nd class, vice Swettenham, who exchanges. Assistant-surgeon Edward Le Blanc, from the 38th Foot, to be staff-surgeon of the 2nd class, vice Dods, appointed to the 71st Foot. John Campbell, gentleman, to be assistant-surgeon to the forces, vice W. S. Saunders, who resigns.

2nd West York Regiment of West Riding Yeomanry Cavalry.—Commission signed by the Lord-lieutenant of the West Riding:—George Micklethwaite Stansfeld, to be surgeon, vice Jubb, resigned.

Naval Appointments.—Assistant-surgeon Robert C. Scott (1847), from the Excellent, gunnery-ship at Portsmouth, to the Intrepid, screw-steam tender to the Assistance, one of the vessels destined for the Arctic Expedition. Surgeon Daniel Ritchie (1846), to be surgeon-superintendent of the Pestonjee Bomanjee convict-ship. Assistant-surgeons Thomas W. Rimell (1844), from the Monarch, guardship of ordinary, Sheerness, to the Excellent, gunnery-ship at Portsmouth; Charles Roberts (1845), to the Excellent; Mark Hamilton, M.D. (1842), to the Monarch, vice Rimell; John B. Nicolson, M.D. (1841), from the Merlin, Mediterranean steam-packet, to the Antelope, at Woolwich.

Naval Promotions.—Assistaot-surgeons Walter Lawrence, John Bernard (b), W. G. Goldin, William Webber, and Lawrence Carey, to the rank of surgeon.

Medical Appointments and Vacancies.—Dr. W. M. Burslem, having resigned the appointment of Physician to the Surrey Dispensary, the vacancy has been declared; date of election the 1st of April. Candidates to attend the Committee on the 23rd of March, and to produce their testimonials. A house-surgeon is wanted at the Wrexham Infirmary and Dispensary. He will be required to act as apothecary and dispenser, and also as secretary. He must be L.S.A., and unmarried. Salary, 80*l.* a-year, with furnished apartments, coals, candles, washing, attendance, and the sole use of a kitchen garden. Testimonials, etc., to be sent in to the Medical Committee on or before the 15th inst.; date of election not fixed.

Dr. Lethery has been appointed chemical referee by the Common Council, to investigate the quality of the gas furnished by the Central Gas Consumers' Company. Mr. Braude lately declined the appointment.

Her Majesty has directed letters patent to be passed under the Great Seal, granting the dignity of a Knight of the United Kingdom of Great Britain and Ireland, unto Charles Nicholson, M.D., Speaker of the Legislative Council of New South Wales.

Medical Benevolent Fund.—The Right Honourable the Earl of Carlisle has consented to preside at the dinner in behalf of the funds of this most excellent institution, to be held at the London Tavern in May next.

The College Lectures.—Professor Owen will commence a course of lectures in the theatre of the Royal College of Surgeons on the 16th inst., on the Anatomy and Physiology of the Invertebrate Animals. Professor Paget's course on Malignant Tumours will commence on the 11th of May. (See our advertising columns.)

Trinity College, Dublin.—The 24th of February was graduation day at Trinity College, when the degree of M.D. was conferred on John Hill and William Montgomery, besides a long list of LL.B., LL.D., B.D., D.D., and B.A., and M.A. The annual commencement dinner was afterwards held in the College dining-hall, the Lord-Lieutenant being the principal guest.

Pathological Society of London.—Mr. John Butterworth Wilkes, and Dr. Hale were elected members of this Society on the 2nd inst; Dr. Taylor, and Dr. Ely, of Rochester, were nominated as candidates for membership.

Epidemiological Society.—At the meeting of this Society, held at the house of the Royal Medical and Chirurgical Society, on the evening of Monday, March 1, Dr. Babington in the chair, a most elaborate and learned paper "On the Epidemics of the 2nd and 3rd Centuries" by Robert Gordon Latham, M D., F.R.S., was read. A paper by Dr. Baseome, "On the Nature and Causes of Fever, more especially that termed 'Yellow Fever,'" was announced to be read at the ordinary meeting of the Society in April.

Hospital for Incurables.—This charity, it would appear, has only to be named to be supported. The donations recently received are as follow:—Miss Burdett Coutts, 50*l.*; Samuel Gurney, Esq., 50*l.*; W. Tatton Egerton, Esq., M.P., 20*l.*; Loftus Wigram, Esq., 10*l.*; The Lady Olivia Sparrow, 10*l.*; Henry Cole, Esq., C.B., 10*l.*; Rev. Henry Dugmore, 20*l.* We hear also, with pleasure, that the subscription-list is not less promising, and that a moderate income can already be counted on. The Hospital for Incurables has our best wishes.

Coroners' Expenses.—From the report of the Committee for examining the coroners' accounts, which was submitted at the Middlesex sessions on the 26th inst., it appears that the expenses of Mr. Bedford amounted to 212*l.* 18s. 5d., Mr. Baker's to 339*l.* 17s. 10d., while that of Mr. Wakley was 415*l.* 19s. 11d. At the same meeting of the Middlesex magistrates, Mr. Wilkes gave notice, that at the next county day he should move for 5000*l.* for the Lunatic Asylum at Hanwell. Mr. Laurie also stated, that the expenditure at the Colney Hatch Asylum, had exceeded 290,000*l.*

Navy Medical and Scientific Estimates.—In the Navy estimates for 1852-53, just printed by order of the House of Commons, the scientific department is set at 50,353*l.*; the vote last year being but 48,635*l.* Among its items are,—establishment for scientific education at the Royal Naval College at Portsmouth, 2496*l.*; hydrographical department, 30,860*l.*; libraries and museums, 100*l.*! The expenditure for the medical establishments is fixed at 8585*l.*, and for marine infirmaries, 3583*l.* For the medical establishments abroad, the expense is calculated at 6525*l.* The medical expenditure for the dockyards, &c, at home, is set at 3892*l.*; their marine infirmaries at 747*l.* 23,000*l.* are required for medicines, medical stores, and accommodation for the sick afloat.

Novel Treatment of Aneurism.—We have been much interested during the last few weeks in watching the progress of a case of aneurism of the subclavian artery under the care of Mr. Fergusson, in which a novel and ingenious method of treatment has been adopted. In imitation of an occurrence which occasionally happens by accident in cases of aneurism, viz., displacement of the mass of fibrine, or a portion of it, which is usually present in such tumours, whereby, in consequence of alteration in the current of the blood, a spontaneous cure results, Mr. Fergusson has, by manipulation of the tumour, thrown loose a portion of the fibrine in the case alluded to, with the effect of instantaneously arresting all pulsation in the upper limb. In four days a feeble pulsation at the wrist could be detected, but the axillary has been pulseless since. The tumour itself, which was at first about the size of a small hen's-egg, has diminished considerably, and the throbbing within is now little greater than in the subclavian artery of the opposite side, while it has become more solid to the touch. To those familiar with the pathology and treatment of aneurism, and especially the fatal results which have hitherto followed all attempts at cure by operation on the subclavian on the tracheal side of the scaleni muscles we need hardly point out the interesting character of the case now under Mr. Fergusson's care.

Abnormity of the Bladder.—A Renal St. Martin.—The German, whose case was described by Dr. Bauer at a recent meeting of the Medical Society of London, was exhibited on Tuesday last, at the meeting of the Pathological Society, by Dr. Bence Jones, who gave an account of his peculiarities, and alluded to certain experiments of a physiological and therapeutic character which had been made on him by Müller, of Utrecht, all of which, with the deductions drawn by that eminent and scientific chemist, would, Dr. Jones believed, be published. He mentioned many facts respecting the action of certain drugs which had been exhibited by Muller and others, including himself, and added that the man had lent himself readily to the performance of these experiments, and was willing to do so for any one, however prolonged and detailed the series of experiments might be, on receiving an adequate remuneration for his painful and perhaps even injurious submission to them;—injurious, of course, as regards his health. For some time past this man has travelled through the different principal cities of Europe, lending his peculiarly malformed frame for the experiments made by chemists and physiologists, by which, indeed, he contrives to support himself; and Dr. Bence Jones stated that any gentleman desirous by these means to investigate the influence of any drug on the renal apparatus, could procure the person's address from him or from Dr. Sieveking. It is not at all impossible or improbable this man's willingness thus to submit to painful and annoying experiments, may render him, under the circumstances of his especial malformation, as serviceable in the cause of science, so far at least as the renal apparatus is concerned, as St. Martin, the Canadian voyageur, proved to be, with respect to the functions of the stomach and the processes of digestion, in the hands of Dr. Beaumont. The patient may be found at 49, Great Prescot-street, Goodman's-fields.

Charity for Hospital Purposes.—The Chaplain Endowment Fund for St. Mary's Hospital has been fixed at 800*l.*; to raise it, an anonymous benefactor has offered to give 400*l.* as soon as a similar amount has been obtained by other donations. In addition to the 1,000*l.* left to the Fistula Dispensary by the late Mr. Dickenson, he presented 3,000*l.* to that institution during his lifetime. The Board of the Free Cancer Hospital announce the receipt of an anonymous donation of 100*l.* through the Union Bank; and they state further, that they have received 700 guineas on behalf of the Woolrige Fund, leaving six more sums of 50 guineas each yet to be collected. To induce subscriptions, it is proposed to publish a list of the "munificent" donors when the whole amount has been obtained.

St. Pancras.—The Master of the Workhouse in this extensive parish has received from the vestry and Board of Guardians notice of dismissal, chiefly in consequence of his unauthorised interference with the surgeon and his assistants in the performance of their duties to the sick poor in the house, and endeavouring to obtain the sanction of the Poor-law Board for his proceedings. He has been summarily expelled since this was written. *Oh! si sic omnia.*

Small-pox in the Millah Emigrant-ship.—The Millah, an Austrian vessel engaged as an emigrant-ship from Belfast to New York, sailed lately from the former port with 135 passengers, and a crew of 15 sailors on board, with a deficient supply of water and of other necessaries. She was scarcely out of sight of land, when the small-pox broke out, and before they were many days out, some fifty of the passengers were sick, and the vessel put back. It is not stated whether any lives were lost through the disease, nor whether there was a surgeon on board.

Extraordinary Births.—It is stated in the papers, that a woman at Liege, Brussels, has recently been delivered of three children at a birth, thus completing the number of twenty-four in nine years; all her pregnancies terminating in triplets, and all her children being girls, much to the father's annoyance, as he wishes to perpetuate his name in the direct line. These births are at the rate of nearly three annually.

Poisoning by Cantharides.—Richardson, a cooper, 22 years old, was tried at the Home Assizes at Hertford, before Mr. Justice Coleridge, charged with attempting to poison his mother by cantharides. The old lady discovered the attempt on account of the unpleasant taste of the beer to which the poison was added. An additional quantity of cantharides was found in the prisoner's pocket. A surgeon stated, that there was not enough poison used to cause death, and the judge, availing himself of this, said there was no proof of intent to kill. It might have been done for a joke. (!) Richardson was acquitted; his ignorance of the lethal dose thus stood him in good stead.

Ventilation of Emigrant Ships. — The Mariner, an emigrant ship on the Chisholm plan, is about to leave the port of London shortly; her accommodations are of a superior character, and the process of ventilation has been especially attended to. She is fitted with Dr. Borrie's apparatus. A pipe made of perforated zinc is carried along each side of the passengers' deck, a few inches from the ceiling, and communicates at one end of the ship with an air-shaft, from which a current of air is driven along the tube, and carried to an outlet at the other end. The force of the draught is so great, that the air cannot escape through the perforations, but the foul air from the cabins finds its way through the holes into the interior of the pipe, and is instantly swept along to the outlet, thus keeping the 'tween decks clear from an atmosphere that would otherwise deteriorate the health of the passengers, and detract from their comfort. The poop-cabins, the pleasantest part of a ship, constitute the hospital, which, in private emigrant-ships, is generally placed as far forwards as possible, and is close and ill-ventilated. The accommodation and comfort of the sick are thus ensured on board the Mariner.

Hydrophobia.—A Bill has been brought into the House of

Commons to extend the power of magistrates in England and Wales respecting dangerous animals. They may order any dog proved to be in a rabid state to be shot, and also all dogs within ten miles of the spot to be muzzled for ten days. Persons disobeying to be liable to a penalty. It would be better to confer the former power on all her Majesty's lieges; for, while the proof of hydrophobia is being tendered, serious and dreadful injury may be inflicted.

DEATHS *in the Metropolis for the week ending Saturday, February* 28, 1852.

Causes of Death.	Feb. 28. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	489	368	212	1069	10122
Specified Causes	487	368	211	1066	10364
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	152	39	17	208	1980
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	25	17	47	559
3. Tubercular Diseases	80	123	3	206	1776
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	68	29	24	121	1250
5. Diseases of the Heart and Blood-vessels	3	26	24	53	349
6. Diseases of the Lungs and of the other Organs of Respiration ...	90	52	51	193	2070
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	22	29	9	60	615
8. Diseases of the Kidneys, &c. ...	...	12	3	15	95
9. Childbirth, Diseases of the Uterus	...	9	1	10	102
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	2	1	4	79
11. Diseases of the Skin, Cellular Tissue, &c.	1	1	...	2	9
12. Malformations	3	...	...	3	24
13. Premature Birth and Debility ...	22	1	...	23	249
14. Atrophy	17	...	2	19	188
15. Age	...	...	51	51	644
16. Sudden	5	6	3	14	127
17. Violence, Privation, Cold, and Intemperance	18	14	5	37	248
Causes not Specified	2	...	1	3	58

TO CORRESPONDENTS.

D. B. asks, Are superannuated Poor-law medical officers to receive any pension? If so, after how many years' service?

We are sorry to say that no such just provision has been made.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your review of Mr. Davenport's book on "Dentistry," you made the following extract:—

"Mr. Davenport's improved forceps are so adapted, that on one side of the upper molar teeth, which have two spreading fangs, the bill of the instrument will slip between, underneath the crown and alveolar process, and on the opposite side will grip the neck of the tooth, thereby preventing the possibility of slipping or cutting off, and will readily lay hold of the most difficult molars of the upper jaw."—P. 44.

Allow me to say, that forceps on the above plan for molar teeth in both upper and lower jaws, were first suggested by Mr. Clendon, and made by me for that gentleman in 1847; and the wood engravings of those forceps I now enclose were executed by Mr. John Fussell, jun., for Mr. Clendon, in September of that year. Since then, I have made many sets of the same patterns for surgeons as well as for dentists; they were also shown in my case of tooth forceps in the Great Exhibition of last year.

As Mr. Davenport, on the title-page of his book, describes himself as the inventor of these forceps, I conclude he is ignorant of the above facts. Your insertion of this letter will much oblige your humble servant,

W. Jack, Working Instrument-maker.

No. 14, Ratcliff-row, John's-row, St. Luke's, London.

[To the Editor of the Medical Times and Gazette.]

Sir,—The remarks of "Justitia" show what every L.S.A. feels, the unfair position the Apothecaries' Company allow their licentiates to be placed in.

No one, providing he have any diploma, is prevented now practising as an apothecary. Any M.R.C.S. may practise medicine and midwifery, and act in every way as a general practitioner without fear of interruption. The result is, that men will not submit to a fair classical examination and to a medical one that thoroughly tests their fitness for general practitioners when there is no necessity for it. Why should they pay for a diploma too, that confers no benefit on its possessor, and does not exalt his position? They can enter the army, navy, or East India Company's service without it, and the unions no longer insist upon it.

The majority of men now commencing practice have not the licence. Look at the College and Hall lists of successful candidates, and see how greatly the former outnumbers the latter. Not only "in towns such as Liverpool and Manchester," but also in London, the L.S.A.s are being outnumbered by men practising without the Hall's licence. Should things go on as at present, L.S.A.s may be expected in a few years to become almost extinct.

The Apothecaries' Company may be able to exist by trading exclusive of the money derived from licensing; certainly it would be more upright to do so, and to return the money that it has received during the past five years from its licentiates, than to allow matters to continue as at present.

An M.R.C.S. can now practise as a general practitioner as well without the L.S.A. as with it. His diploma gave him a status in society, but the L.S.A. receives a title that he is ashamed of owning, for who puts apothecary on his brass-plate? It may be said, that the Apothecaries' Company is a check upon men practising without any diploma; if so, why should *only* the L.S.A.'s pay for this?

Certain it is that the College diploma is no test of a man's fitness for general practice. Licentiates are now aggrieved, and the public is not benefited. I am, &c. M.R.C.S.E. & L.S.A.

[To the Editor of the Medical Times and Gazette.]

Sir,—I regret that Dr. Hastings should have thought my observations at a late meeting of the Medical Society "implied" any discourtesy towards himself, and that he should have considered it worth while to address you upon the subject.

The circumstances he has stated in your last Number are, however, true in every particular, and could I have supposed that my referring to them would have afforded him gratification, I might have done so, although I should still have considered it quite uncalled for. Feeling that the brief and single opportunity which I had of seeing the sponge passed by Dr. Hastings into the larynx, skilfully and successfully as the operation was performed, was not the true cause of my pursuing the subject, but that this was solely due to the more numerous and repeated operations practised upon some of my own out-patients at the Consumption Hospital, by Dr. Horace Green, of New York, wherein I could see that the experiment was not only practicable, but also harmless and useful, I naturally spoke of the latter gentleman as my instructor.

Had Dr. Hastings originated the operation, the case would have been very different, and I should have given him the praise he would have deserved; but I conceive that I was no more required to allude to having once witnessed his performing it, than a surgeon, in addressing a Society upon any particular operation, would be expected to give a list of every one by whom he had seen it practised. If hospital surgeons looked for such an honour, and, in failing to find it, were to write to the medical journals, your pages would be tolerably replete with matters, for which, I imagine, they were never designed. I am, &c. Richard Payne Cotton.

46, Clarges-street.

Our Correspondents will save us much trouble, and sometimes much difficulty, if they will themselves append a succinct title to their various communications.

Truth.—The error will be noticed when the work is reviewed.

Medicus.—Many. Consult "Hooper's Morbid Anatomy of the Uterus" in particular, and any of the lately published works on midwifery.

A. B.—No legitimate practitioner makes such a disease a speciality. Quacks do, and unless "A. B." wishes to suffer both in body and purse, these he will avoid. He may consult any experienced medical man with benefit.

Alpha.—Palmer's Pentaglot Dictionary.

An Old Subscriber at Morpeth.—1. No. 2. No.

Earwig.—The party named is, we believe, the proprietor.

Dr. Griffith's proof reached us too late for this week's Journal.

[To the Editor of the Medical Times and Gazette.]

Sir,—Permit me, through the medium of your influential columns, to impress on the editor and publishers of that well-conducted Journal, the "British and Foreign Medico-Chirurgical Review," the need, nay, necessity, if they desire to render it as convenient and useful to its regular readers as it may be, of their adding to it, at certain intervals,—say at the end of every tenth or twelfth volume,—a general index, on such a minute and comprehensive plan as that supplied to the "British and Foreign Medical Review" after its termination. Periodicals such as elaborate reviews especially, each article of which is itself a treatise, and needs in fact itself an index, urgently require such general indices, otherwise they become, when accumulated, highly inconvenient for reference, and, instead of being resources from which intellectual fruition and benefit might be derived, are little better than useless and cumbersome to their possessors. Were the publishers of the "Review" to try the experiment of publishing such an index as I have intimated, separate from the Journal itself, and to be paid for separately, I believe they would find that nineteen-twentieths of its readers would be glad to accept it.

I am &c.,

An Admirer of the "British and Foreign Medico-Chirurgical Review," and "Medical Times and Gazette."

Mr. Haymes, of Thirsk.—The letter forwarded would, we fear, subject us to the unpleasantness of an action at law, were we to publish it. At the same time, we regret that any man claiming to belong to the Profession should be guilty of the conduct mentioned by Mr. Haymes.

COMMUNICATIONS have been received from—

Dr. Barclay, of St. George's Hospital, and Curzon-street—Hospital Reports: Secondary Deposits; Mr. Martin M. Bell, of Jersey—Case of Spasmodic Affection of the Larynx, simulating Laryngitis; Dr. John D. Brown, of Strood, Kent—Case of Acute Arachnitis; Dr. Cunham, of Ramsgate—On Sulphuric Acid in Diarrhœa; Mr. Toynbee, of St. Mary's Hospital, and Savile-row—On Polypi of the Ear; Dr. Kemp, of Chiswick—On the Composition of Mucus; Dr. Carr, of Rusholme—A Point in Medical Ethics; M. D., London—Reply to Dr. Higgins; Mr. Lowe, of Congleton—On Caries of the Os Calcis; Mr. Forman, of Teignmouth—Case of Caustic applied to the Glottis; Mr. Fergusson, of King's College, and George-street, Hanover-square—Clinical Lecture on Cleft Palate; Mr. Henry Smith, of Caroline-street—Case of Excision of Tumour of the Upper Jaw; Scotus—On Medical Ethics; Philo-Chirurgus—On Ingrowing Toe-nails; A Subscriber; Dr. George Gregory, of the Small-pox Hospital, and Camden-square; A Member of the Sydenham Society; Dr. McWilliam, of Trinity-square; A. B.; Dr. Barker, of Dumfries; Truth; Verax; Medicus; Alpha; M.R.C.S.E. and L.S.A.; Dr. Cotton; Mr. Jack, Instrument-maker, of Ratcliff-row, St. Luke's; D. B.; Earwig; An Old Subscriber at Morpeth; O mi-hi.

The Pharmaceutical Journal (March 1.)

CONTAINING THE

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The Right Hon. the Earl of CARLISLE in the Chair.

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N.B.—It is necessary to caution the public against recent attempts to introduce, as Mr. Bourjeaurd's manufacture, articles imperfect in application and inferior in material, by surreptitiously copying his drawings and explanatory official circulars.

ORIGINAL LECTURES.

CLINICAL LECTURE

AT

University College Hospital.

By E. A. PARKES, M.D.

REPEATED ATTACKS OF DIARRHŒA—DURING A DIARRHŒAL ATTACK A CHOLEROID SEIZURE—NINE DAYS AFTERWARDS A CUTANEOUS ERUPTION IDENTICAL WITH THE CHOLERA-EXANTHEM.

Gentlemen,—The case I have to consider to-day is, like many cases of some duration, so complicated, that I am afraid I cannot attempt to bring before you its main features in the short space of an hour. In order to do so as simply as possible, I shall not pass regularly over the case from its commencement to its close, but shall select, in the first place, what appears to have been the prominent disease at the period when the patient first came under observation; and then return to the other, and, at the present time, minor affections, which are also present.

Elizabeth Williams, aged 31, a married woman, in a respectable condition of life, healthy and robust-looking in appearance, was admitted into hospital on the 20th January, 1852. Confining ourselves, for the moment, to the most urgent disease then present, the following was the patient's medical history:—Two years and a half ago, during the prevalence of cholera, she was attacked with severe bowel complaint, which lasted for five weeks, and during which time she passed blood for two days in some quantity, and for a week longer in smaller quantity. She also vomited, but the vomited matters were not bloody. There was also epistaxis. The nature of this complaint can now hardly be determined. Was it a choleroid attack of any kind? Was it typhoid fever? The duration, (five weeks,) the bleeding from the nose, and the hæmorrhage from the bowels, which came on about a week or ten days after the commencement of the illness, are circumstances somewhat in favour of this notion. Or, was the attack a dysenteric one? Whatever may have been its nature, the patient states, that since this time she has been constantly subject to bowel complaint on the least error in diet. Nine months ago this diarrhœa, always troublesome, became more constant, and from that time to the present she has never passed a week without an attack. During the attacks she has sometimes had as many as thirteen stools in twenty-four hours. The stools have been usually watery, yellowish, sometimes bloody; and have been attended with griping pains and tenesmus. There seems also to have been something like lientery, as she says she sometimes passed her food, even meat, scarcely changed.

On the 3rd of January an attack of diarrhœa commenced, and for seven days she passed three or four stools every day. There was also nausea and retching. On the 10th she had five stools, and an attack of rigors, which lasted for twenty minutes; and after which she continued to feel chilly all day. On the 11th she had vomiting and extremely painful cramps in the arms, legs, and neck, which lasted for twenty-four hours. At the same time the purging became very profuse; she passed constantly under her, with tormina, tenesmus, and scalding at the anus, pale, watery stools, without blood. From the 12th to the 15th the purging disappeared; but the vomiting continued till the latter day. From the 16th, till admission, slight diarrhœa (three or four stools per diem) returned. The urine, which had been free till the 11th, was very scanty on that day; according to the patient's own account, she passed only half a teacupful of very dark-coloured urine. On the 12th and 13th there was complete suppression of urine; in the afternoon of the 14th she passed a small quantity, with straining and scalding. It continued scanty till the 19th. She had some other symptoms also, viz., shooting lumbar pains on the 11th and 12th, and aching across the loins afterwards; severe headache from the 11th to admission; marked intolerance of light and dimness of sight at the same time. On the 15th and 16th she had slight, and on the 17th and 18th severe, delirium. Throughout she had vertigo; throughout there was excessive thirst, complete loss of appetite, and great debility, so that she took to her bed on the 10th. There appear to have been no subjective febrile symptoms; but rather, throughout, a sense of coldness and chilliness. There have been no catarrhal or coryzal symptoms.

To the above symptoms there was added another, which it will be advisable at once to consider fully. On the 19th, the day previous to admission, between 6 and 7 p.m., the patient felt an itching and tingling at the groins and about the buttocks; on examination, an eruption was discovered at these parts. On the following morning the eruption appeared on the chest and shoulders. When she was seen in the afternoon of this day it was abundantly out on the upper part of the chest, the shoulders, the back, buttocks, and thighs. It is questionable whether it had touched the face, at any rate it did not do so subsequently; it appeared on the lower part of the upper arms, the forearms, the hands, (slightly,) and on the legs, below the knees, at a subsequent date.

On the first day of admission, about twenty hours after its first appearance, the eruption on the back and about the shoulders presented a dark-red patchy erythemo-papular appearance, the elevations being, however, much larger than common papulæ; the colour disappeared on pressure, but the elevations were not obliterable. The eruption had something of a dark rubeolous character, the papulæ being however too large, without special grouping, and the non-elevated redness being too great for this disease. I may mention, also, that the patient had had measles. The resemblance to measles struck, however, several acute observers. The eruption resembled also some profuse forms of erythemo-papular syphilide; it reminded me, also, in some measure, of a patient I once saw in the Small-pox Hospital, the eruption in whom was termed *erythema rubeolosum*, by Mr. Marson, and was accurately described in the *Lancet* for 1848, by Mr. Erasmus Wilson, under the term of *roseola punctata*. It differed however from this in several particulars, as you may see, on comparing Mr. Wilson's description with that I am about to detail.

On the thighs and buttocks, where the eruption had first appeared, it had quite another character. It was extremely like urticaria; there were large wheals, pale-red in colour, and sometimes with a deeper redness at their bases. They were thickly set together, and were quite unattended by the usual itching and tingling of urticaria. This appearance immediately suggested the true affinity of the eruption.

These two eruptions were different phases of the same thing, and were succeeded by another stage. Instead, however, of reading the reports from day to day, I will describe as accurately as I can the course of the eruption. Ushered in by sensations of tingling and itching, which then disappeared, or occasionally returned for a short time, appearing first on the lower part of the body and thighs, then on the upper part of the chest, then on the fore-arms and legs, this eruption had a duration in each locality of about three days, and an extreme duration, as respects the whole body, of between five and six days. Thus, having appeared on the evening of the 19th, at midday on the 24th, nothing was left of it but a faint reddish discoloration here and there. It was not followed by desquamation. As regards colour, it was, speaking generally, brighter at the onset, and darker at the close, yet it varied in this, and in some parts was darker at the onset. The lightest colour seen was rather vivid; the darkest, dull brownish red. It changed colour, too, in accordance with a change of form, as immediately to be noticed. As regards form, it seemed to pass through three phases, which occupied about twenty or twenty-four hours each; but which were not so perfectly marked in the parts last affected as in the others. The first form was flat extensive patchy redness, to which rapidly succeeded large papular-like elevations, which arose on the patches, and were connected by them. The papulæ so rapidly succeeded the erythema, that, as far as concerns time, the two appearances may be classed together. To this erythemo-papular stage, succeeded the period of urticaria-like elevations; the patchy redness now altogether in some places, partially in others, disappeared, so that the wheals were pale in colour. In the third stage, the wheals became levelled, and, at the same time, a diffuse redness reappeared; this was not patchy, but diffused almost uniformly over a great extent of surface, and was unmixed with papulæ; it soon disappeared, becoming a little darker and mottled as it did so

Such is the account of this eruption. Allow me now to read you a description, or rather an abstract of it, which has been given by two most accurate observers of a similar

eruption. After stating that the eruption in question sometimes commenced with general diffuse lively redness, especially of the face, and swelling, the writers whose description I am about to condense, continue:—

"When this diffuse redness and swelling did not occur, the exanthem generally appeared in the form of larger, irregular, erythema-like patches, with undefined borders. Sooner or later, the hyperhæmia at some point became greater, and little spots arose, became more numerous, more closely set together, and formed an eruption like roseola; in some cases it then disappeared; in the majority it advanced; the little spots became elevated, and resembled measles; they increased still further, and formed wheals very closely resembling urticaria, and varying in size from a line in diameter, to that of a sixpence. The resemblance to urticaria was increased by the fact, that the wheals were paler in the centre than at the periphery; they were either isolated or confluent; they gradually lessened in size, became flat, and were succeeded by diffused patches, which themselves gradually faded. This eruption especially differed from customary urticaria, inasmuch as there were often no abnormal sensations, or only at the onset a little itching, but never the wearisome itching of common urticaria."(a) The duration of this eruption was from twenty-four hours to thirty-six hours sometimes, or a day longer, or, if it spread over the body, it lasted five or six days. Its colour was usually light; in one case "dark red, like the typhus exanthem."

You will perceive the very close similitude of this eruption to that of our patient,—the erythema, the papulæ, the wheals, the subsequent general erythematous redness. The description is that given by Reinhardt and Leubuscher, in the eruption which comes on occasionally from five to nine days after Asiatic cholera, and has been supposed to be peculiar to the "cholera-typhoid," as the sequelæ of cholera have rather unfortunately been called.

The description given by Gustav Simon of the cholera exanthem, also entirely corresponds with the eruption in our case. At first, he says, there are round red patches, which are isolated or confluent; in from twelve to sixteen hours, the larger and redder spots pass into wheals something like urticaria, only there is no itching. After from twenty-four to thirty-six hours the wheals flatten, and a kind of erythema occurs, which disappears in another twenty-four hours. Is not this an exact description of our eruption? The two most important differences between the cholera exanthem, as described by these three authors, and the eruption we have seen, is that no desquamation has occurred in our case; but then I have seen two cases of cholera exanthem (one of which, except as regards brightness of colour, closely resembling the present case) in which there was no desquamation, so that the undoubted cholera-exanthem appears to vary as regards this point.

The resemblance of the cholera-exanthem to urticaria has been noticed also by another German, Flechner.

Now, that the physical characters and the course of our eruption were exactly those of the cholera-exanthem is a point on which I conceive there can be no doubt. Directly I saw the urticaria-like appearance, the cholera-typhoid-eruption which I had seen was recalled to my mind, and I was reminded also instantly of Simon's and of Reinhardt's and Leubuscher's description. Admitting then, this fact, were the antecedents of the eruption the same? Now, that this woman laboured under Asiatic cholera may be considered improbable, yet, that the symptoms were *cholera-like* is evident. In a patient subject to diarrhœal attacks, there occurred for about eight days an ordinary attack, then suddenly ensued profuse watery purging, vomiting, and cramps for about a day, and nine days subsequently an eruption, resembling the cholera-exanthem, appeared. Unfortunately, our knowledge of other symptoms, of the state of the pulse, the skin, the voice, the countenance, the respiration, the nature of the stools, etc., is deficient, and we are, therefore, unable to decide the case satisfactorily. The fact that Asiatic Cholera does not exist in this country at present, should not be too much insisted upon, as sporadic cases may occur after an epidemic. The symptoms referred to the head, viz., headache, delirium, vertigo, were similar to those observed in mild cases of cholera-typhoid, only they seem to have come on at the time of the worst stage of the disease, (on the 11th,) while in the cholera-typhoid they do not usually occur till after the algide stage has completely passed.

In the absence of more perfect knowledge of the earlier stages of this disease, I feel unable to decide positively as to its nature. It was cholera-like certainly, but whether it was a mild attack of true cholera or not cannot be ascertained. The cholera exanthem has been considered by some to be peculiar to the after stage of Asiatic cholera, and if this were true, then our case must have been one of Asiatic cholera. I am not, however, disposed to admit this view, but to believe that the so-called cholera-exanthem is dependent on certain conditions of the blood, which may be present, but are not constant in the after stages of cholera, and which may also exist in cases which cannot be classed as Asiatic cholera, although in some of their features they have a close affinity with it. What this condition of the blood may be, we are not in a position to say. As in the case of common urticaria, it appears rather to be connected with substances absorbed from, or not excreted by, the gastro-enteric mucous membrane, than with the retention of any urinary ingredient or its derivatives in the system. Except that the eruption cannot occur independently of an antecedent gastro-enteric affection, and that there is no reason to believe that it cannot recur repeatedly in the same person, it might be classed among the true exanthemata, so regular is its course. But, unlike these diseases, the cause of this eruption is either produced in the course of a previous disease, or requires this disease as a predisposing antecedent. There are some other interesting points about this case, to which I must allude in the next lecture.

(a) "Reinhardt and Leubuscher uber Cholera."—*Virchow's Archiv.*, Vol. II., p. 470. The above is not a complete translation of Reinhardt and Leubuscher's description, as it would have been too long for the lecture, but it is an accurate abstract.

CLINICAL LECTURE ON STRICTURE OF THE URETHRA AND PERINEAL SECTION,

AT

King's College Hospital.

By WILLIAM FERGUSSON, Esq., F.R.S.

Professor of Surgery in King's College, London, and Surgeon to King's College Hospital, etc.

Gentlemen,—It is my purpose, in the lecture of this day, to deliver to you some observations on stricture of the urethra and fistula in perineo—subjects which always demand our great attention, and which are now more than usually interesting, as there has been of late a great deal of discussion in the surgical world respecting the treatment of these affections. I am also the more induced to bring the subject of stricture of the urethra under your notice, because you have had an opportunity of seeing a most interesting case of this nature brought into the operating theatre last Saturday; and it is particularly from what occurred here on that occasion, that I dwell more fully upon the matter at present than I did at that time. Before, however, proceeding any further, I will just give you some of the particulars of this case, and of what happened.

The patient, a man, aged 32, a native of Lincolnshire, was admitted under my care with a very bad stricture of the urethra at the latter end of October. The cause of the stricture was an injury which he received twelve months previously, from his being thrown with violence on to the pommel of a saddle, while leaping a horse at a fence. This injury produced no external wound, but blood passed away from the urethra, and he had retention of urine. He placed himself under the care of a surgeon, who relieved him by the warm bath. Subsequently, the symptoms of stricture became more and more severe, and his surgeon made attempts to get an instrument into the bladder, but always failed in doing so. When he came into the hospital he was found to have a very bad stricture. There was some induration along the course of the urethra in the perinæum, but not very much. He passed his water with difficulty, and in a stream about as large as a No. 2 catheter. On examination, a stricture was found at the bulb of the urethra, which would not admit any instrument. Careful attempts were made on various occasions, but no instrument could be passed, and the symptoms became much more severe,—the most prominent being a constant dribbling away of the urine.

On November 15, the patient was brought into the theatre

for the purpose of having the strictured part of the urethra divided from the outside. Chloroform was given, and when the patient was fully under its influence, Mr. Fergusson first tried to pass a No. 2 silver catheter, but after making an attempt for some time he could not get it in. No 4 was now tried; this was passed somewhat further into the canal, but not into the bladder. No. 5 was then tried, and, after the employment of some considerable force, it passed through the stricture and went into the bladder. A large quantity of alkaline urine was drawn off, the instrument was tied in, and the patient placed in bed.

Well, gentlemen, you saw the result obtained in this case, and you will recollect that in my observations addressed to you afterwards, I told you that in this case was involved a practical question of very great interest to surgeons of the present time, for this man was brought into the theatre for the purpose of undergoing the operation of perinæal section; that is to say, providing I could not do what I had hitherto failed in doing, viz., passing an instrument into his bladder. However, when chloroform was used I was able to pass a catheter, and therefore the condition which in my opinion warranted an external incision before, no longer existed; but you will remember, I told you that the essential feature connected with the propriety of the operation, as recommended by Mr. Syme of Edinburgh, was still here, for the proposal of that gentleman is to divide the stricture only when an instrument can be previously passed as a guide to cut upon. I stated, that I would be contented with having passed an instrument, and try if the patient would go on well without any cutting, although I did not make up my mind that he would do eventually without submitting to a cutting operation, because it was one of the worst and most difficult kinds of stricture,—one resulting from an injury,—always most difficult to treat and most ready to return. Having said thus much about this case, I will, before making some general observations, refer you to another instance, where I have put in force the same kind of operation which I intended to have done in the one just mentioned, but where the circumstances are considerably different; it is that of the man Abraham, 49 years of age, who was admitted under my care in the middle of October with a fistulous opening in the perinæum, and a stricture of the urethra. Somewhat less than a year ago, he had the symptoms of his disorder for the first time. Instruments were passed from time to time, and soon after their use an abscess appeared in the perinæum; it was opened, and the urine escaped from the sinus which remained. He soon went to one of the London hospitals, and remained there for six weeks, where instruments were passed, but he did not get any better. During the summer he came to King's College Hospital under my care, but his health was weak, and he was advised to go to the sea-side and return again.

When he was re-admitted, there was still a large sinus remaining in the perinæum which had existed on the former occasion; the urine came away through it, and there was not the least disposition to heal, although as large as a No. 8 catheter could be inserted into the bladder. On the 18th he was brought into the theatre, and a No. 6 grooved staff being first passed into the bladder, the strictured portion of the urethra was divided, and the sinus laid freely open by an incision in the median line. I shall say something more about this case to you presently; but just now I may state, that, in this instance, the operation commonly called perinæal section has been done, and it was my intention to have performed it in the first-mentioned case; but, as matters turned out, it was not considered necessary or justifiable. I have no doubt that most of you must have had your attention drawn to this subject, because much has of late been written about it by various surgeons, and I myself have brought it frequently under your observation. Now, the ordinary mode of proceeding when a case of stricture is under our care, is to introduce an instrument, and endeavour to dilate the stricture with the least possible amount of injury to the urethra. In common cases we begin with a No. 3 or 4 bougie or catheter, but sometimes a smaller instrument is found necessary; in another case we find we can begin with a larger, such as No. 6 or No. 8,—the surgeon repeating the proceeding from time to time according to circumstances; sometimes as early as twenty-four hours; but, when there is any amount of irritation, forty-eight hours or more are allowed to elapse; in the majority of cases every third day, or twice a week, will be sufficient. Now, in most cases, benefit is immediately derived after the passage of the first instrument; many symptoms are relieved such as the difficulty in making water, the dribbling, and the discharge. Usually some half dozen operations are required before very decided benefit accrues; and before a cure is brought about, it may be necessary to pass instruments on twenty or thirty occasions. This all depends upon the particular condition of the stricture,—upon the number of strictures. There may be more than one obstruction; one may be soft, easily yielding; while another may be hard and resisting. In some cases there is great irritability; the patient will scarcely bear the introduction of an instrument, and, instead of there being any improvement, the irritability will become so distressing that the practice must be laid aside. But, in a great number of these troublesome cases, it will be found that the general condition of the system is at fault; and it is highly necessary that the surgeon should find this out, and, by the administration of proper remedies, endeavour to correct the morbid state. It is highly important to bear this in mind, for, by the use of proper medicines, a stricture may become so far improved, that some persons even have fancied that a cure may be brought about in this manner; but you must not trust to this; it is only those of very limited experience who would assert that strictures may be cured by medicines alone.

It often happens that the surgeon may be enabled to pass, after a time, a No. 10 or 12 catheter; but the patient will ere long return with many of his bad symptoms on him; perhaps in a few months, weeks, days, or even hours, the stricture may be as bad as ever. This is one of those instances where there is an obstinate tendency in the strictured portion of the urethra to contract again. In cases like this, various measures have been recommended, but more especially caustic,—either nitrate of silver or potassa fusa; the latter application has been extensively used, but by no one has it been so much employed and lauded as by my friend Mr. Wade. He has had great experience, and speaks most highly of it; and I myself have, in several instances, where I thought it would be a fit remedy, used it, and can speak as to the beneficial influence which it possesses in the treatment of some severe forms of stricture. Nevertheless, the application of caustic may be said to be an exception to the general rule, and the treatment of these bad and irritable cases of strictures has generally been by the bougie or catheter.

Now, it is a very common complication of stricture, that there should be abscess or sinus; in the one case, there may be an opening into the urethra; in another, the opening may be in the perinæum. The history of these cases is somewhat obscure; however, in some instances, it is curious how you may trace the history of an abscess connected with the urethra. You may detect matter early,—open it even,—and yet you may not perceive that it is connected with the urethra, until you find that the urine dribbles away from the opening you have made; then, indeed, there can be no doubt that the abscess has opened into the urethral canal. When the abscess has been opened in the perinæum, and it is connected with the urethra, a fistulous tract remains, and it is extremely difficult to close the sinus. In general, the surgeon has been hitherto content to dilate the stricture; and in some cases where the urethra has been fully opened up, the sinus closes; in others, he lays them freely open, as in any other locality. This measure sometimes succeeds. Still there are some cases very difficult to close, because the urine coming away from the bladder cannot pass freely through the strictured portion of the canal, and, therefore, makes its way more easily through the fistulous opening. After lithotomy, we have a sinus in the perinæum, through which the urine flows for some days; but we leave the wound and urethra to themselves, and, after a time, the former heals up entirely. It is a rare thing to meet with a sinus after lithotomy; but here is the difference: In the latter, the urethra is quite healthy—the water can pass freely along it—there is no obstacle there; but there is a little obstacle in the wound, which becomes greater and greater every day, so that it soon heals up, leaving the urine to pass by the urethra; whereas, in a case of fistula accompanying stricture, there is an obstacle to the urine flowing by the urethra, and therefore it comes through the artificial opening, and prevents it from healing.

Now, suppose the surgeon meets with a very bad case of irritable stricture, such as I have been talking of, and which does not yield to instruments, Can he do anything more? It might perhaps be set down as a maxim in surgery, that

he can do no more; but maxims of surgery are not immutable, and in this art there is still much room for improvement. Now, I think it must be admitted that we are indebted to Mr. Syme for proposing division of a stricture under these circumstances. Division of a stricture by external incision, however, is by no means a modern practice; it is as old as the time of Wiseman, and it has been followed since, from date to date. The surgeon has been induced to operate in consequence of his inability to pass a catheter, in infiltration of urine, where there have been bad fistulæ, and where life has been placed in jeopardy. Still the operation has been by no means of frequent occurrence; but this practice has been put in force with the very best results in such cases. I myself have had numerous opportunities of performing what we may now term, the old operation of perinæal section, and with very great success.

But the practice which has been recommended by Mr. Syme is different from that I have just been speaking of. The proposal of that surgeon is, to divide the urethra externally in certain cases of irritable and contractile stricture which resist the ordinary practice by the bougie; and he makes it an essential feature in his operation, that a small sound should be previously introduced through the stricture, and that the division should be made upon this.

Now, my own opinion is, that in certain cases it is an admirable operation, and gives relief; but then I think it is an operation which ought not to be applied without great consideration, and not until all other modes of treatment have failed; for although some cases have turned out well, much mischief has been done in others. I myself have seen death result from it, and also danger of the worst possible description, and I am so impressed with this, that I must beg of you to be very cautious before you resort to this so-called perineal section. Its true value remains yet to be proved; the time is not yet come for us to say much positively of it. We have not yet had sufficient experience to say that it will prove generally serviceable. One of the most satisfactory cases I have had was in a gentleman who suffered terribly from stricture and its consequences. He was at first under the care of the late lamented Mr. Liston, who treated him by bougies with relief. At that surgeon's death he came under my care. His chief symptom then was a succession of aguish fits, which were most violent, and in fact the patient himself thought that he had regular ague. However, I found that he had a very troublesome stricture. There was excessive irritability when an attempt was made to pass instruments, and it was followed by a severe attack of shivering. No benefit was derived by the attempts at dilatation, although I could pass a No. 3 or No. 4 catheter, and it appeared to me that the patient's constitutional suffering was entirely dependent on the state of his urethra. With a view of effecting a permanent cure, I proposed to him that I should cut his stricture and relieve his ague at the same time. The operation was done; the patient had no bad symptom after it, and all his previous distress went away. This is now three years ago; within the last twelvemonths, however, some of his former bad symptoms have returned, in consequence of his having neglected to pass bougies; and he has lately been to town to have instruments passed, as the urethra had again contracted. Now, here you have an instance where the operation was attended with great benefit; but still it shows, that after all, there is a tendency in the disease to return, and that the cure is not a permanent one.

I will now just draw your attention to the case of the man Abraham, on whom I performed the same operation. This case may make us doubt as to whether it was the best thing that could be done for him. I could pass an instrument here, but, nevertheless, the fistula in the perinæum would not heal, and I therefore performed the operation according to Mr. Syme's plan; but those of you who have watched the progress of the case will see that he is not much better. There is now—more than a month after the operation—a great deal of irritation about the bladder; he passes his water frequently, and it contains a great deal of mucus and pus; the wound has not closed up; in fact, instead of his being well a week or two after the operation, he is now perhaps not much better than before. However, we must not judge hastily of this operation from this case alone: we may probably have some further opportunities of testing the value of this proceeding; and until we have had some further experience of it, it will be well if we suspend our judgment regarding it.

In Barton's case, first spoken of, there was impervious stricture; in fact, I could not pass any instrument after many attempts, and you remember he was suffering from a most severe symptom, namely, a constant dribbling of urine. The bladder was distended; so much so, in fact, that it could contain no more water, and it kept dribbling away. This man himself was quite unaware that his bladder was in this state. Under these circumstances, and finding that I could not pass any instrument into the bladder, it seemed to me that it would be well were I to try incision. Hitherto the patient had been treated in the ordinary manner,—that is to say, I had used the catheter on my visits to the hospital while he was in bed, but I now determined to have him brought into the theatre to place him fully under the influence of chloroform, and then make a last attempt to pass an instrument; if this failed, to perform the perineal section. You saw that, after two or three patient attempts, I was enabled to break down the firm stricture, and pass the catheter into the bladder. I did not use a small instrument, because it is much more dangerous than a large one under such circumstances. The catheter was tied into the patient's bladder, and allowed to remain. In the course of ten days I could pass a No. 10 instrument.

It is worthy of remark, that in this instance the patient bore the presence of the catheter uncommonly well. A great difficulty is often met with in the circumstance of patients not being able to bear an instrument in the urethra for any length of time. It produces great distress, and brings on general irritative fever, but there was nothing of the sort in Barton's case, and hence we were able to open up the passage so rapidly. Now, as regards the practice adopted in this instance, there is no novelty in it; but I do not think it is often resorted to. I must confess to you, that the instrument was forced through the urethra, or it may have been pushed through the diseased tissues as near the urethra as possible; but the surgeon is not to be blamed for adopting this mode of practice under circumstances of a like nature. He must, however, be excessively cautious in what he is doing. After a stricture has been forced in this way, it is an admirable practice to keep an instrument in the urethra for some days if it can be borne, for the pressure of the catheter keeps it open, and causes absorption from the indurated tissue, just as pressure by means of a firm bandage effects the dispersion of the induration around an old ulcer.

In a case of this kind the instruments of Mr. Thomas Wakley might be tried, and probably with success, if mere rapid dilatation would suffice; but, unfortunately, we cannot always depend upon it, for it will happen, that, after having rapidly dilated a stricture, there may be great irritation afterwards, and ere long matters may be as bad as before.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. THOMAS'S HOSPITAL.

By J. L. MILTON, Esq.

EMPYEMA FROM INJURY.—DEATH.—*POST-MORTEM* EXAMINATION.

The following case appears to us to possess sufficient interest to exonerate us from the necessity of drawing the reader's attention to it by any introductory remarks. The obstinate persistence of a disease, lighted up, it would appear, in a bad constitution by an accident, which, however severe, yet allows the majority of men to escape, forms the chief feature in its history. From the very copious notes furnished by Mr. Lankester, we are enabled to extract the following details:—

The patient, a lad of 17 years of age, was admitted under Dr. Peacock, in November, 1850, for empyema of three years' duration, occasioned by fracture of three of the ribs of the left side. The violence of the accident must necessarily have been considerable, as he had been struck by the shaft of a cart, which pinned him to the wall.

He was taken to the London Hospital, where the fracture of the ribs was treated in the usual way. Here he suffered very severely from pain in the side, which three bleedings and the application of thirty-six leeches failed to relieve. The pain, cough, and dyspnœa continued, and the boy's health being in a very unsatisfactory state, he was transferred to Dr. Frampton, under whose care he remained

for nearly twelve weeks. About a week after his admission, an abscess of considerable size formed on the front of the sternum. This was opened, and continued to discharge for about two weeks. Soon after this the pain in the side set in with great severity. He could not lie on his left side for a month subsequent to the accident, but after that time he was unable to lie on his right side without suffering under increased dyspnœa and cough. There was semi-purulent expectoration. His recovery was very slow, and it was fourteen weeks before he could be made an out-patient. His cough at this time was much better, but neither it nor the expectoration were either now or afterwards entirely absent.

About ten months after both became much aggravated. He improved as summer approached, but with the return of winter he had another access of cough, and now applied at the Hospital for Diseases of the Chest, where he became a patient under Dr. Peacock, having never yet been able to lie on his right side.

At this time the Report says, his general appearance "is very strumous, the lips being thick, the fingers long and clubbed, and the nails incurvated."

"The right side of the chest is apparently larger than the left, and the spine has a curve, with its convexity at the dorsal region presented to the right; the lower part of the sternum also deviates to the right." The cicatrix of the abscess, an inch and a half in length, showed by its position that this had taken place on a level with the third cartilage. The respiratory movements were almost wholly confined to the right side. Here also the vocal thrill was fully perceived, while it was entirely absent on the left.

In front, on the right side, resonance and respiration were good; on the left there was a loud tympanitic resonance, extending over the whole of the lower part; above there is feeble respiration.

The expectoration was very copious, and principally purulent; there was very severe suffocative cough if he lay on either side, and a quantity of expectorant matter was sometimes almost vomited up. The feet somewhat œdematous; urine pale, somewhat albuminous (1.016.)

He was ordered quinine and iron, with hyoscyamus and Dover's powder at night, and counter-irritation to the chest. Soon after this the cod-liver oil was commenced.

Under these measures he soon improved, and by the 11th of January, 1851, a considerable advance had been made. He had less cough, and the expectoration was much diminished, though some portions were quite purulent. The dulness on percussion did not extend so high up, and respiration was heard low down, "everywhere except in the anterior part of the lower lateral region." "But," says the Report, "there is a distinct bruit *de pot fêlé* beneath the left clavicle, together with cavernous rhonchus voice and cough."

On the 12th of January, thirty-two days later, he was much better. The pulse was 92, quiet, and of good volume; the left side was much contracted, and by no means so dull as before. There was, however, an obscure tympanitic sound towards the acromial end of the left clavicle, and on listening there a loud gurgling inspiratory rhonchus was heard. The sputum was much less in quantity, but was still thrown off in purulent masses with spumous bronchial secretion.

On the 24th he was made an out-patient, his progress having been steady, and his condition extremely favourable.

But this state, unfortunately, was not destined to be permanent. His improvement continued steadily to advance till about the beginning of December, 1851, when he was, perhaps in consequence of the severe weather, suddenly attacked with griping pain and diarrhœa, while the cough and expectoration returned with all their former severity. He was again admitted into St. Thomas's Hospital, under Dr. Peacock, Dec. 16, 1851.

The pulse at this time was quiet; the tongue morbidly red; the cough very troublesome, and large quantities of purulent matter were expectorated, which, as well as the breath, were extremely fetid. His appetite was gone, and the diarrhœa still continued; the curvature of the spine seemed aggravated, and the contraction of the left side of the chest had increased, while the right side remained large and expanded. Mr. Lankester's report goes on to say:—"There is a very distinct falling in below the left clavicle; the left side is dull on percussion, and the respiration is bronchial, but not distinctly cavernous; below, respiration is wholly abolished."

He was again ordered quinine and iron, with a little paregoric, three times a-day; the pulv. cret. c. opio was given at night, and he was put on a milk diet. Beef tea and wine were subsequently prescribed, with fish, and the quinine was used without iron; while acetate of lead and opium were substituted for the compound chalk powder.

He still, however, continued to grow worse; eggs were added to his diet, and the quantity of wine increased; but, by the 17th of January, no beneficial change had resulted. He was thinner and paler, and the expectoration was more copious. He generally lay half bent over to the left side, finding this easier than on the right; the bowels remained relaxed, and he suffered under night perspirations.

A large cavity was now made out beneath the left clavicle, and ʒij. of the cod-liver oil were ordered thrice a-day. Pains in the limbs now set in, accompanied, however, by some subsidence in the chest symptoms. He then sank rapidly, and died January 23.

Post-mortem revealed what might have been in some degree anticipated, an extensive empyema; there being a large cavity in the pleura, containing dark-coloured and offensive pus with air; but there were some points of interest which seem to merit further detail.

About midway between the apex and the base there was a distinct perforation in the pleura, by which the cavity of this membrane communicated with the bronchi. The lining membrane of the bronchial tubes was of a deep leaden colour, and in places apparently ulcerated; they were also much dilated. The curvature of the spine, which seems to have resulted from the contraction of the left side of the chest, was very well marked, the bend being very considerable; the convexity presented towards the right side of the dorsal vetebræ, and thus the capacity of the left side of the chest was much diminished. The other organs were much in the usual state, except that the heart was entirely adherent to the pericardium, and that the plates at the lower part of the ilium were rough and projecting, as if ulceration would at no very distant date have added another pang to his sufferings.

KING'S COLLEGE HOSPITAL.

By HENRY SMITH, Esq., F.R.C.S.

(Formerly House-Surgeon to the Hospital.)

DISEASE OF HIP-JOINT.

In the treatment of disease of the hip-joint in its various stages, there are certain circumstances connected with the morbid phenomena which deserve more than ordinary attention on the part of the surgeon, inasmuch as their existence involves a certain amount of complication of the case, and, consequently, a corresponding degree of doubt as to the precise line of practice which should be adopted. As an instance, I may mention the occurrence of disease of the hip-joint in its early stage in a scrofulous child. The treatment of such a case, at first sight, may appear to be very simple, and one about which there ought to be no doubt in the minds of well educated surgeons. Still they are not yet agreed as to whether absolute and persistent rest of the affected joint should be enforced by confinement to bed, or whether the patient should not rather be allowed to move about in the open air, and thus of necessity to some extent prevent that quiet which is by the other party deemed so expedient.

It is, however, in the latter stage of disease of the hip-joint, when abscess, the necessary effect of long continued irritation, has formed, that circumstances every now and then obtain which render the treatment somewhat doubtful, and induce the surgeon to pause before he makes up his mind as to what he is to do. He who has had opportunity of watching several cases of hip disease, in which large abscess had formed, will agree with me, that there must be considerable difference in the treatment which should be pursued. This is more particularly in reference to the point of interfering with an abscess by surgical means. It must be confessed, that there is some difficulty in deciding as to what should be done in some of these cases. A huge abscess, connected with a large joint and almost ready to burst, is no trifling matter, and in a great number of cases the constitution sympathises most severely with the local disturbance, and the bistoury of the surgeon alone is required to quiet this irritation, and to put the joint into a more favourable condition for getting well. On the other hand, we as frequently see patients, and especially children, apparently suffering very little, either locally or constitutionally, from the existence of large collections of matter connected with the hip or with the spine, and, in such cases, perhaps it is better to let nature take her course, as far at least as regards the dealing with the abscess.

A case which has lately been under treatment in this hospital has shown the difficulty of deciding what should be done under such circumstances. The subject of the disease was a child, aged 3 years, who was admitted as an in-patient in the beginning of November, under the care of Mr Fergusson. About nine months ago, it had fallen down stairs, and shortly afterwards symptoms of disease of the hip showed themselves in limping with the right leg, and pain of great severity in the corresponding knee. At this time the child

was confined to bed. A splint was applied to the limb, and cod-liver oil was given, but no benefit arose from this treatment; and about four months ago signs of abscess began to appear in the buttock, and the child was brought as an out-patient to this hospital, when leeches were at first applied, and afterwards orders were given that the patient should be sent into the country.

The swelling of the buttock increased much, and the general symptoms got worse. Accordingly the little boy was entered as an in-patient, when there was found to be a large swelling on the whole of the right buttock, extending round to the inner part of the thigh, just below the insertion of the psoas and iliacus tendons. There was distinct fluctuation. The patient lay with the limb shortened and flexed; drawn up against the other, and toes inverted. There was excessive pain when any movement of the hip was attempted. The patient was allowed to keep perfectly at rest, and the ordinary means were employed, but the abscess still increased in size, and the constitution suffered considerably. On the 27th of November, Mr. Fergusson made a small puncture into the abscess, for the purpose of giving some relief to the pain. The opening was very small, and the matter was only permitted to escape very gently. In the course of two days the incision had nearly healed up, but the child had become very feverish, and appeared to suffer a great deal. On December 1, he was less feverish, but there was a considerable increase in the swelling, and there was that peculiar glossy appearance of the skin which indicated inflammation of the sac of the abscess, and the part was exceedingly painful and tense. Mr. Fergusson, therefore, made a very free incision into the abscess, and let out a large quantity of matter. From this time a large discharge of pus took place, but the child's constitution severely sympathised with the inflammation which had been excited, he became excessively feverish and restless, fell away much in flesh, and some weeks elapsed before this general disturbance had abated.

The foregoing is a brief outline of a case—minute particulars being avoided—where is illustrated the difficulty which sometimes exists in ascertaining what are the instances in which an abscess should be interfered with. In this little patient the existence of the large quantity of pus was doubtless causing a great deal of disturbance, and it appeared to be a case in which benefit would be derived from making a puncture into the collection, but still the result showed that irritation was increased by this practice, and that the patient was placed in a more unfavourable condition than he was in prior to the surgical interference; and, indeed, that very circumstance which is advanced as an objection to the opening of these abscesses did take place here, viz., inflammation of the sac and general irritative fever; still, in very similar cases, the very reverse will take place, and as much relief as is possible to be given will ensue if a large collection of matter in connexion with the hip-joint is carefully opened. At all events it is, as a general rule, advisable, as was done in this instance, to postpone the opening of the abscess as long as possible; and upon this important practical point let us bear in mind what the great English surgeon of the preceding generation has said:—"With respect to the treatment of abscesses, it is right in all diseases of joints, and especially in diseases of the hip-joint, to postpone the opening of them as long as you can; unless the abscess is exceedingly large, it is best not to open it at all. The reason of this is, that if you open the abscess early you expose the cavity of the joint to irritation, whereas, if you delay the opening of it, you suffer the abscess to make its passage to a considerable distance from the joint, so that the opening of it will not be liable to excite much irritation in the cavity of the joint. The irritation will be very slight if you delay the opening, but if you make it early the effect will be just the same as if you were to make an incision into the joint. Give time to nature to perform her task and to fill the joint itself with adhesive matter as the abscess extends down the limb to a great distance from the joint. I have made up my mind most decidedly on this point, having again and again had an opportunity of contrasting both modes of practice."

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

ROYAL BERKSHIRE HOSPITAL.

By F. A. BULLEY, Esq., F.R.C.S.,
Surgeon to the Hospital.

STRANGULATED FEMORAL HERNIA—GANGRENE OF THE CONTAINED OMENTUM — OPERATION. — DEATH.—POST-MORTEM EXAMINATION.

Jane B., aged 55, was admitted into the hospital on the evening of Friday, September 19th, 1851, on account of a femoral hernia, which, it was reported, had been strangulated since the previous Monday, having been attacked on that day with vomiting, and an unusual pain in the neighbourhood of the left groin. She had been aware of a swelling having existed in the part for several years, which had come down suddenly in the first instance after some particular exertion, never being able completely to reduce it, and it had latterly become increased in size. We find on her admission, that there is a flattened swelling in the left femoral region, of about the size of half a pullet's egg, without any of the ordinary elasticity of hernial enlargements, but pitting deeply on pressure, the skin being immovably adherent to the tissues underneath, and of a dull livid-red colour, over the greater part of the surface of the swelling. At one point the skin is rather of a brighter red colour than in other parts, and here it seems disposed to give way, although there is no feeling of the fluctuation of matter underneath. The swelling gradually diffuses itself into the surrounding cellular tissue for some distance, being equally œdematous at all parts. The abdomen is distended, but not tympanitic or particularly tender on pressure, except in the immediate neighbourhood of the hernia. Tongue dry, brown in its centre, with a rough, dirty white coating at the sides; pulse extremely feeble, 114 in a minute. Her general appearance indicates considerable physical prostration. Almost constant hiccough.

Unfortunately, the nature of the disease had not been suspected until the morning previous to admission, when, the discovery being made, an attempt was made at reduction, but apparently without success; repeated the same evening, and again on the morning of admission.

After these manipulations, she became somewhat easier, and the vomiting of fæcal matter, which, we understood, had previously been incessant, became much less harassing; indeed, when brought to the hospital, she vomited but little; what she did eject, however, had a slightly stercoraceous smell, but was not obviously of a fæcal character.

She had had an abundant relief from the bowels on the Wednesday following the strangulation, two days from its occurrence, and another smaller one on the following morning.

In consequence of the weak state of the patient, I did not consider it either expedient or safe to perform any operation on the hernial tumour at once, especially, as I thought, that from the disease having existed so long, and from her general appearance, gangrene had ensued; but the patient having somewhat rallied towards the afternoon of the next day, a consultation was held, when it was determined to make an exploratory incision to ascertain more exactly the nature of the case.

The operation consisted in making an incision through the thickened and œdematous cellular structure down to the sac, which, when exposed to view, was observed to be of a dark chocolate-colour, and apparently completely gangrenous, giving out a putrid, offensive smell when its outer surface was laid bare. A small opening being then carefully made in the sac, a considerable quantity of fetid air escaped through the aperture, the sac immediately collapsing; at first sight, it seemed as if a portion of sphacelated intestine had been wounded by the knife, or had collapsed on the opening of the sac; but, on examination of the wound, nothing like intestine could be discovered, but only a small quantity of dark-coloured putrid substance, apparently consisting of decomposed omentum soaked in an exceedingly offensive saneous fluid, which was also contained in the sac. There was no particular constriction at the ring, as the finger might easily have been passed into the abdomen, and as I was fearful of breaking down any adhesions which might have been formed between the probably gangrenous intestine within the abdomen and the ring; by doing so, I thought it prudent not to proceed any further with the operation; she was therefore removed from the table.

Vespere.—She has continued sleeping heavily since the operation. Pulse 102, rather firmer; the vomiting has continued; her respiration is remarkably slow, only four in a minute. To take half an ounce of castor oil.

21st.—The surface of the wound made by the operation is covered with a black, quaggy mass of putrified omentum; less vomiting, but feeling sick. Borborygmi occasionally very offensive. Abdomen distended, and rather tender to the touch; pulse, 112; tongue, brown.

Vespere.—Fotus c. spirit. juniperi abdom. ℞ Magnes. sulphat., ʒj.; morphiæ hydrochlor., gr. ½ in haust. secundis horis sumend. Took some brandy, which remained on her stomach. Frequent hiccough.

22nd.—Vomiting diminished; tongue moister; pulse 116. Rather light-headed.

23rd.—No vomiting; she has had a slight natural motion; tongue parched and brown.

24th.—The patient, after remaining insensible for several hours, died this afternoon at four o'clock.

Post-mortem Inspection Sixteen Hours after Death.—The intestine generally, in the neighbourhood of the hernia, was found to be in various degrees of congestion, low inflammation, and gangrene; that portion of it situated near the crural opening had completely lost its vitality, enveloped between two folds of mortified omentum, continuous with that found in the sac, by which it was retained close to the femoral ring, but was still contained within the abdominal cavity. The intestine had not been injured by the knife, nor had it spontaneously collapsed, as was supposed, during the operation. There was no attempt at adhesion of any portion of the intestine to the ring.

Although the case just related is not one of uncommon occurrence in hospital practice, it appeared to possess some features of interest, which I thought might excuse its somewhat minute detail. The length of time the hernia had been strangulated before admission into hospital, and the consequent occurrence of gangrene of the contained parts, which was suspected, offered but slight hopes of benefit from an operation which was only executed with the view of satisfying our own minds on the subject, and giving the patient her last chance of relief.

It is just probable that the intestine, in a state of impending gangrene from the lengthened period of its constriction, had been returned into the cavity of the abdomen by the manipulations to which the hernial tumour had been subjected the day previous to the admission of the patient, the omentum remaining unreduced through its adhesion to the neck of the sac and femoral ring; but the returned intestine, not being able to recover from the effects of the strangulation, had passed into the gangrenous condition, and, in consequence of the constitutional debility under which the patient was suffering, was unable to contract such an adhesion to the ring, as, on its giving way, would insure the most natural and not unusual termination of gangrened intestinal hernia, the substitution of a new passage for the fæcal contents of the intestine through a wound, either spontaneously occurring, or made by an operation.

Perhaps upon the whole, assuming this view of the case to be the true one, it would have been better if the reduction had not been accomplished, or even attempted; for in that case, setting aside the injury which is often inflicted on inflamed and partially disorganised intestine by violent and long-continued attempts at reduction, and which was probably inflicted in the present case, the intestine, if it had been found in the sac in the operation, might have been subjected to those operative manipulations which have been recommended and successfully carried out by Mr. Lawrence and others for the treatment of mortified intestine.

Again, on the other hand, this may have been from the first a case of omental hernia only, and the degrees of disorganisation observed *post mortem* in the intestine might have resulted from inflammation propagated from the inflamed omentum in the sac—a not unusual occurrence, preventible, in the generality of instances, by a well-timed resort to an operation for the relief of the strictured omentum.

Not the least curious part of this case, was the distension of the sac by fetid gas, the product of the putrefaction of its contents; and I must confess I felt somewhat alarmed at the sudden collapse of what I at first feared was the contained intestine; but the circumstance of my not being able to find the remains of anything like disorganised intestine in the wound, and the patient having lived four days after the operation without the appearance of any fæcal matter in the wound, and as, moreover, she had had a tolerable relief from the bowels by the natural passage after the operation, my mind was set at ease on this point, and I could only consider that, if the symptoms of strangulation had been earlier observed, and an operation had been earlier resorted to, the case, whatever might have been the nature of the protrusion, might have terminated in a different manner to what I have recorded.

THE PARISIAN PRACTICE OF MEDICINE AND SURGERY.

HOSPITAL LA CHARITÉ.

By F. W. PAVY, Esq.

CROUP IN AN ADULT FEMALE, WITH EXPECTORATION OF PSEUDO-MEMBRANOUS TUBULAR MOULDS OF THE TRACHEA—DEATH—AUTOPSY.

The following particulars refer to an exceedingly interesting case of the above disease occurring in a female thirty-four years of age, and eight months advanced in pregnancy, who was recently under the care of M. Bouilland, the clinical professor at La Charité.

M. A., aged 31, a woman of spare frame and delicate appearance, had been suffering from slight catarrh, and, on Feb. 6th, was seized with all the urgent symptoms of croup, and the following day was admitted into St. Madeleine Ward, at La Charité. Respiration much embarrassed; expression exceedingly anxious; pulse quick, and lips approaching to a livid hue.

Feb. 8th.—During the night expectorated a pseudo-membranous tube, almost perfect, four or five inches in length, and completely modelling the interior of the trachea and lower part of the larynx. Since this, has been much relieved, and her breathing is now comparatively free and easy, and unattended with any perceptible stridulous noise, unless the ear be applied to the neck directly over the trachea. Has completely lost her voice, being only able to reply to questions in a very low whisper. The fœtal heart distinctly audible through the stethoscope applied to the abdomen.

9th.—Has expectorated another membraniform tube, even more complete than the other, and, at its lower end, it is branched off into two portions, about three quarters of an inch in length, exactly corresponding with the upper part of the right and left bronchial tubes. Patient's expression tranquil, her breathing free and noiseless, and, in fact, her general condition such as to warrant just grounds of hope for a favourable termination of her malady. Pulsations of the fœtal heart more feeble and less distinctly audible than yesterday; but she has experienced no uterine pains, and no unusual movements of the fœtus.

6 p.m.—Having progressed favourably up to this time, she was now seized with labour pains, and, in a short time, gave birth to a still-born male child, of full size, and well developed for an eight months' pregnancy. The child did not manifest the slightest sign of life on its expulsion from the uterus; indeed, we have reason to presume that its death must have taken place previous to the commencement of labour; for, according to the statement of M. Bouillaud's "Chef de Clinique," the blood, at the time of delivery, was found coagulated in the umbilical vein.

From the period of abortion she remained in a very weak and depressed condition until 2 a.m., on the following day, when she expired, not asphyxiated,—for her breathing continued tranquil,—but apparently from asthenia, in conjunction with anæmia.

The treatment of the case consisted in the administration of a few emetic doses of tartarised antimony at the commencement, and in the local application of counter-irritants to the neck and leeches to the sub-maxillary region, combined with general blood-letting from the arm to a pretty large extent—a remedy which forms the sheet-anchor of M. Bouillaud's practice, not only in all the true inflammatory diseases, but also in typhoid fever, which this distinguished physician, contrary to the opinion, we believe, of most on the Continent and of all in England, regards as essentially an inflammatory affection of the circulatory system.

Autopsy Thirty Hours after Death.—Body spare, but otherwise in good condition, and no marks of congestion on its exterior, except around the external parts of generation, which were swollen, and gave exit to a little bloody discharge. Mucous surface of the trachea, larynx, and epiglottis deeply injected. A few small patches of a pseudo-membranous material adherent to the posterior surface of the epiglottis, and to the interior of the larynx, in the neighbourhood of the vocal chords; the whole of the trachea being quite free from this membranous exudation. Bronchial tubes, even to the smaller ramifications, injected. Pulmonary tissue generally crepitant and healthy; but a few small portions of it bearing signs of congestion, and others affected with ramollissement, being easily scraped away by the knife. Slight marks of inflammation of the right pleura. Heart perfectly healthy in appearance, but of rather small dimensions; both ventricles contracted, and their cavities almost empty. The inner surface of the arch, and the commencement of the descending aorta intensely red; the upper part of the œsophagus was much injected. Uterus about the size of a full-grown fœtal head, its walls about an inch in thickness, and its cavity containing a small quantity of dark-coloured loosely-coagulated blood. Brain healthy, and bearing no marks of venous congestion.

The above case is one presenting many features of great interest in point of rarity. It is difficult to say how it would have terminated, had bleeding been more cautiously and less freely resorted to. This practice is certainly sometimes very successful in M. Bouillaud's hands, but it seems to us to be attended with considerable risk and protracted convalescence.

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LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, March 13.—Medical Society of London. *Subject:*—Dr. Handfield Jones, "On the Morbid Anatomy of the Kidney, in reference to Albuminurea." Eight o'Clock.

—— —— Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Monday, March 15.—Chemical Society. Eight o'Clock.

—— —— Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

—— —— Statistical Society of London. *Anniversary*, at Three o'Clock. *Subjects* for Ordinary Meeting:—1. F. G. P. Neison, Esq., "On the Rate of Mortality Prevailing in the Medical Profession." 2. Lieut-Col. Sykes, "On the Mortality in the Bombay Army." Eight o'Clock.

Tuesday, March 16.—Pathological Society of London. *Meeting of Council.* Seven o'Clock.

—— —— Royal Institution. *Subject:* — Professor T. Wharton Jones, "On Animal Physiology." Three o'Clock.

Wednesday, March 17.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.

Thursday, March 18.—Harveian Society. Eight o'Clock.

—— —— Royal Institution. *Subject:*—Rev. J. Barlow, M.A., Sec. R.I., "On the Physical Principles of the Steam-Engine." Three o'Clock.

Friday, March 19.—Royal Institution. *Subject:*—J. J. Bigsby, M.D., F.G.S., M.R.I., "Illustrations of Lake Superior." Half-past Eight o'Clock.

—— —— Western Medical and Surgical Society of London. *Subject:* Mr. Martyn, "On Puerperal Fever." Eight o'Clock.

Saturday, March 20.—Medical Society of London. *Subject:*—Mr. Barlow, "On Fatty Degeneration of the Heart and Brain." Eight o'Clock.

—— —— Royal Institution. *Subject:* — Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

The Cholera in Oran.—The President of the French Republic, in October and November last, conferred recompences on civil functionaries and others in Algeria, who distinguished themselves by their devotedness during the visitation of cholera at Oran. By decrees dated the 12th of December last, but only just now inserted in the *Moniteur*, it appears, that he also granted six crosses of the Legion of Honour, twenty-eight medals of Honour, and twenty-eight "honourable mentions" to officers and men of the hospital service who distinguished themselves on the same occasion.

Medical Times & Gazette.

SATURDAY, MARCH 13.

MEATS PRESERVED IN VACUO.

The invention of a method of preserving meats *in vacuo* seems to us of so much importance to the community at large, that we have seen with regret the bad odour in which it has been brought by the late investigations in our Dockyards. What the most scientific men of the day hailed as a most valuable discovery in the arts, applicable to the immediate and most pressing want of the people, seems now in danger of being denounced as a "delusion and a snare," and a "Goldner's canister" adopted as the epitome of everything that is disgusting and fraudulent. And no doubt there has been some colour for this popular judgment. Commissioners, accustomed, we suppose, to pretty strong smells, have been described as having fainted at the intolerable stench given forth by the meats under examination; and, at the first blush, there seems no getting out of the conclusion, that the contractor and his method are alike untrustworthy. A more patient investigation of the facts, however, shows that very much misrepresentation has taken place. Careless Goldner has been, without doubt, but we do not think he has been proved fraudulent; while his system, the more it is looked at, the more it seems important in its bearings upon our social economy.

The return called for by Mr. Miles, with respect to this matter, has just been issued, and it supplies a few figures which set the case in a much clearer light than we have hitherto been able to view it in. According to this document, out of 2,741,988 lbs. of beef issued to the Navy since the commencement of the contracts with Goldner, up to January, 1851, 2,613,069 lbs. were found fit for use, or 95 per cent. of the whole quantity. Of the rejected canisters, only 19 were discovered to have contained so-called offal; the remainder were condemned on account of the putrid condition of their contents. We are aware that, while this Report has been in progress, more condemnations have taken place in the Dockyards, not only of Goldner's canisters, but of those prepared by other houses. All the revelations, however, tell the same tale,—the vast number of canisters have been condemned on account of the putrescence of their contents. Now, public opinion, without inquiring into the matter, has at once debited all this corruption to Goldner's villany in putting up bad meat, whereas we think we can show that it is rather owing to the carelessness and roughness with which these fragile cases have been treated since they have been in the hands of the Admiralty. Without particularising the method adopted in preserving these meats, it will be necessary to state, that a complete vacuum is obtained in each canister, and as long as this is preserved, so long the meat will keep, if it be till doomsday. That this vacuum does duly exist, the concave appearance of the cover of the canister is the unerring sign, and the storekeeper could detect an unsound one among a hundred at a single glance. It cannot therefore be argued, that they might have been received in a damaged condition. If they were, it must have arisen from sheer neglect of the Victualling Office. But let us now consider the nature of these canisters. It is no fancy to look upon them as so many fortresses incessantly besieged by an ever watchful enemy—the universal air. One such an antagonist would seem sufficient, but the

carelessness of the naval authorities must needs supply it with a nimble and subtle ally—moisture, which, by its effects upon the metal, speedily made a way for its fellow element to rush in and utterly destroy. An examination of some of the condemned canisters shows incontestably that such was the case. There is an exposed edge round the cover, where the iron is unprotected. Oxidation has invariably attacked this weak point, and crept on under the tin until it has somewhere forced its way through. Either in this manner, or by the fracture of the solder, the whole mischief has been done. This is no fanciful theory of our own, but is borne out by facts. For instance, of the 86,611 lbs. of preserved meat supplied by a London firm at a high price to the ships Assistance and Resolute, forming Captain Austin's expedition in search of Franklin, 34,431 lbs. were consumed, out of which only 18 lbs. were condemned on the voyage. On the return of the ships, however, 762 lbs. more were found to be bad; and since the remainder has been stored a further condemnation of 1226 lbs. has taken place, and pretty nearly all of it is said to be now rotten. Here, then, it is clear, the meat must have been good on the voyage, bad at its termination, and worse still, after it had been some time in store. In other words, the longer the canisters were under the effect of moisture, the more speedily they became oxidised and destroyed. If such destruction followed the simple voyage to, and sojourn in, the cold and dry atmosphere of the Arctic circle, what must be expected to follow the transfer of these canisters from depôt to depôt in the tropics, now being carried in the hold like so many bundles of fire-wood, now landed and tossed about like so many bricks,—what else than total destruction, by the time they have made, as many of them have done, the voyage of the world? Yet we will venture to say, that if these delicate packages had been stored in boxes and properly secured, all the meat would have been kept perfectly sound to this day.

The contractor is of course answerable for whatever improper substances have been found in the canisters. Pieces of heart, tongue, and ligament, and portions of the entrails, containing ordure, were reported as having been discovered. Now, really, it does not seem to us that the two former are at all noxious substances. A neat's tongue is certainly not offal, and some people can even relish heart, while the "intestines containing ordure," turn out to be portions of the œsophagus filled with undigested food. No one will defend the introduction of such portions of the beast or of ligament in the canisters; and there is no doubt that the Admiralty had a perfect right to break the contract upon this very point, as it is absolutely necessary that the most scrupulous faith should be kept in matters of this kind where discovery is impossible until it is too late.

That the contractor did not wilfully introduce these substances we can fully believe, as it would have answered no purpose to have done so, the meat at Moldavia, where these canisters were prepared, costing him absolutely nothing; and we can scarcely conceive a man mad enough to render himself liable to heavy penalties, and to ruin his credit by putting in bad meat, when good would have been equally cheap.

And here we arrive at a point at which we can put aside the disputed question of the canisters, and refer to the real importance of the invention of preserving meat *in vacuo*, as applied by Goldner himself. The high price of meat in this country, compared with other articles of food, is evident to every one. The medical man well knows that certain diseases of the lower classes owe their development to an insufficient supply of nitrogenised food. Any method, then, by which animal food can be extensively brought within the range of the people's means, must be of great value in a hygienic point of view. Any discovery by which the cornucopia of one land can be made to pour its ample stores into the open lap of another, cheaply and speedily, must be of great national importance. When Goldner entered into the first contract with the Admiralty, finding meat in this country so dear, he looked around for a cheaper market; this he found in Moldavia. Those who have voyaged down the Danube, must remember those huge beasts, with hides like a dirty white-washed wall, and with gigantic, spreading horns. These beasts, which make the finest beef in the world, absolutely cost the purchaser nothing, at least as far as the carcase is concerned, —the hide, horns, hoofs, and tallow, fetching the full price, in Turkey, of the entire bullock. In the immediate vicinity of the vast plains where these herds feed, at Galatz, on the Danube, Goldner placed his factory; and by this means he was enabled to supply to the Navy admirable beef, freed of bone and cooked, for 5d. per lb.; and at the present moment, the same beef, preserved *in vacuo*, an eminent London house would be glad to supply at 3d. per lb. This, we say, is a great fact, and one which no accidental failure should be allowed to damage. These Moldavian plains, from which such supplies might be drawn, are not, in fact, at the present moment, so distant, as far as the purposes of communication are concerned, as the Highlands of Scotland. Messages are continually passing between the London houses and Pesth in four hours, by means of the electric telegraph; from Pesth to Galatz it is only three days' journey; and, before long, the electric wire will extend the whole distance, and the plains of Moldavia will be absolutely within nearer call than the pastures of Herefordshire. It seems to us, that, whatever becomes of Mr. Goldner, the path he has pointed out to us should not be forsaken. We now see clearly the sources from which an almost inexhaustible supply of fresh meat can be obtained at a very small price. We see that the surplus animal food, in a highly concentrated form, might be transported from one country to another just as easily as grain is at the present time. There can be no doubt that the Navy might be supplied with fresh meat at half the cost of the salt junk with which our sailors are for the greater part fed. And there would be another advantage in this change,—it would annihilate the scurvy, an object not thoroughly accomplished by the present plan of serving out lime-juice (itself an expensive item); for, strange as it might seem, the sailors regard this pleasant acid in the nature of a medicine, and there is so much difficulty in making them take it regularly, that now and then we hear of scurvy having appeared in our ships when on long voyages.

These are matters of such deep importance, that we have been led to dwell upon them at greater length than usual,—the more especially as the whole question has been overloaded with misstatements, and the most important point involved in it—the possibility of obtaining an immense increase of the very food the country most requires—has not been clearly seen, or at least not sufficiently appreciated.

THE UNION SURGEONS.

Among other plans which the late Opposition and present Ministry introduced to the notice of the country, was one for transferring the maintenance of the poor to the Consolidated Fund. This arrangement was intended to be a relief to the agricultural interest, and the chief arguments for its adoption were derived from this consideration. As

proposed, it was decidedly false in principle, and probably impracticable in practice.

There was, however, one part of the project which was both reasonable and practicable. If the Poor-rates were defrayed from the Consolidated Fund, the salaries of the Union Surgeons would, of course, be drawn from the same source. The Union Surgeons would then become officers of Government, paid out of the imperial treasury, subjected to Governmental superintendence, and removed altogether from the petty meddling, and the vexatious control of parochial Bumbles. There was no reason why this portion of the scheme should not be detached from the other portions, and carried into operation, without violating in any way municipal institutions.

The Government are said not to be pledged to protection, nor to any of the measures for which their party have so long agitated. This may be so, and yet we can hardly suppose that the great country party will remain satisfied with an abandonment of their principles. They will demand and obtain some assistance; and if this assistance does not take the shape of a protective duty on corn, it will assuredly be given in the form of some transfer of the burthens of land to the imperial fund.

For ourselves, we should regard an arrangement of this kind, if carried out in the manner formerly recommended by Mr. Disraeli, as a complete mistake. The great advantages of the local administration of the Poor-rates, counterbalance all the defects of unequal taxation and irregular pressure. But the method in which the Union Surgeons should be employed and paid, is apart altogether from this general question; and we are anxious to detach it, if possible, from the plan with which it has been mixed up.

If the present Ministry can hold their ground, some project for alteration in the relief of the poor will doubtless soon assume considerable importance; and we would strongly urge the Committee of Union Surgeons, if they still continue to act, to put themselves in communication with the authorities, and to be prepared with such suggestions as they may consider most advantageous for the numerous body they represent. We are convinced that the Union Surgeons can never be placed in a proper position until they are disconnected from the Board of Guardians. Until this be done they never can be independent, nor discharge fearlessly their irksome and difficult duties. A Union surgeon should indeed be subjected to surveillance, but it should be the surveillance of an intelligent inspector, and not of a mass of ignorant tradesmen, who take good care to let their parish surgeons know, that an unpalatable suggestion had better not he proffered.

UNIVERSITY OF LONDON.

In 1837, in consequence of the illiberal spirit which presided over the old Universities of Cambridge and Oxford, a liberal Government founded a new "liberal" University, ycleped the London University. Fifteen years have elapsed, and lo! the new is discovered to be far more illiberal in constitution than the elder institutions. The University of London is composed of 28 general Colleges and 100 Medical Colleges; 5 of the 28 general Colleges are open to all denominations, 9 to Roman Catholics, 10 to Nonconformists, 2 to Wesleyans, and 2 to the members of the Established Church. The Medical Schools are situated in all parts of the United Kingdom and the Colonies.

There are now seven hundred graduates of the University; and these seven hundred men, without the prestige which clings to those educated at the older seats of learning, and liberal by birth, education, and policy, naturally desire to see the University of which they are graduates assimilated in constitution to the other liberal institutions of the country, and to have a voice in the management of their own affairs, or, at least, in the choice of those who are to manage them. At the present time, its graduates have no more to do with the University of London than they have with the University of Oxford. Such a state of things cannot last; either a more liberal Charter must be given, or the University itself will collapse. An institution which appeals to the liberal spirit of the age for support can only live by practising liberality. Self-election or Crown nomination may do well enough when rich rewards and sounding names fall on those who bow and grumble not; but these things won't do when an Institution has neither the one nor the other to bestow. The whole tribe of M'Sycophants—and their name is legion—have no places here; they *boo* for what they can get, and they fly from institutions that cannot pay for their *boos*.

Of the seven hundred graduates of the University of London, it would seem, from the excellent and temperate speech of Mr. Quain, B.L.,(a) referred to in our last Number, nearly one-third belong to the Medical Profession, 40 are law graduates, and the remainder have taken degrees in arts. The average age of the graduates is about 27 years. With reference to their position in life, 70 or 80 are ministers of religion of various denominations, and a very large proportion of the remainder are professors or teachers in the various Colleges or Medical Schools of the University.

We were glad to see that Sir James Graham expressed his conviction, when presiding over the meeting of the proprietary of University College, that before long corporate privileges would be granted by the Legislature to the graduates of the University of London.

SWANSEA OFFICER OF HEALTH.

At a meeting of the Swansea Board of Health, a report was presented by a Committee, stating that the appointment of an Officer of Health would tend materially to promote the sanitary improvement of the town, and recommending that Mr. O. G. Williams having kindly offered to perform the duties of Officer of Health gratuitously, his offer be accepted with thanks.

The Board, however, declined to accept Mr. O. G. Williams's gratuitous services.

Now, we cannot too strongly condemn the system of medical men offering to perform laborious duties without fee or reward. The public come, in such cases, to one of two conclusions; viz., either that the services performed are valueless, or that the medical man is indirectly paid—that is, that he gets introduction and practice by his (so-called) labour of love. Both opinions are derogatory to the honour of the Profession. If medical men wish the public to value their services, they must make the public pay for their services. And Boards of Health, etc., if they wish to have their work well done, must pay for its being done. Let them remember, that it won't do to look a gift horse in the mouth.

All the speakers at the Swansea Board admitted that the motives animating Mr. O. G. Williams in making the offer were unimpeachable.

(a) Mr. Quain is an LL.B. of the University of London, and must not be confounded with Professor Quain.

MEDICAL MEN IN PARLIAMENT.

We observe with pleasure that an eminent medical practitioner, Dr. Whyte, has started as a candidate for the Elgin District of Burghs. In an excellent address issued by him, we find the following passage :—

"But further, gentlemen, should you confer on me the high honour of being your representative, I shall neglect no opportunity of advancing the general interests of the nation. As a member of the medical profession, I shall give my most earnest attention to all legislative measures involving the public health. Our sanitary system is still most imperfect; our whole medical polity is defective. Whenever measures are brought before the House of Commons bearing on these vitally important questions, they shall have my most watchful attention and diligent consideration.

"On the important question of Parliamentary Reform, I have no hesitation in declaring my conviction, that knowledge, capital, and industry should be fairly represented in Parliament; but I am satisfied, gentlemen, that knowledge has not hitherto had its due share in the representation of the country. While, therefore, on the one hand, I will not oppose any reasonable concessions to the claims of industry, and especially will endeavour to protect the poor voter by the ballot, I will strenuously labour to secure for the practical science and intellect of this country a more direct and larger share in the representation.

"In particular, I will endeavour to obtain for our Scottish Universities the electoral rights already enjoyed by the Universities of England and Ireland, feeling that this is a concession most justly due to the enlightened intellect of my native land."

This exposition so exactly expresses our own convictions, that, apart from our community of caste, we are most anxious for Dr. Whyte's success. We should have an independent medical member in the House who would really do the Profession some service, and we should have one more adherent to that increasing party, who laugh at the absurdity of theoretically giving the franchise to education, and of practically estimating that education by a money standard of so many shillings per annum. As Dr. Whyte most truly says, "Knowledge has not hitherto had its due share in the representation of the country;" but we have great hopes that we shall soon be enabled to say that this reproach has been done away with. In order to carry out so desirable an object, we trust that the medical practitioners of the Elgin Burghs will exert themselves strenuously to aid Dr. Whyte.

REVIEWS.

On the Diseases of the Bladder and Prostate Gland. By William Coulson, Surgeon to St. Mary's Hospital, etc. Fourth Edition. 8vo. Pp. 485. London: Churchill. 1852.

Ten years have elapsed since the publication of the last edition of this work. Of the progress science has made during that time Mr. Coulson has fully availed himself, and ten years of active professional employment have enabled him to add much new practical matter; so that the present work is rather a new one than an edition of that published in 1842.

It is divided into twenty chapters. The first treats of the urine in its normal and abnormal states, and comprises 81 pages. It is one of the best epitomes of the subject with which we are acquainted. Mr. Coulson's object in treating of the states of the urine thus fully is explained in the following passage :—

"In diseases of the bladder and prostate gland, the secretion of urine is often so much deranged as to render a knowledge of the changes which it undergoes indispensable to the successful management of these affections; and the physician might as well attempt to treat disorders of the organs of circulation and respiration without the stethoscope, as the surgeon those now under consideration, without such knowledge as I have alluded to. I have, therefore, deemed it necessary to prefix here an account of the alterations to which modern science has shown this fluid liable, and of the practical indications afforded by its various appearances."

The physical characters of healthy urine are first passed in review, and the modifications those characters experience, and their signification concisely described. Then the chemical constitution of normal urine is given; and the various alterations which each of its principles may undergo compatibly with health, or as the result or cause of disease, are brought under the reader's notice. The abnormal states of the urine are then described,—states of the urine, that is to say, which are invariably the result of disease. Here are arranged those conditions of the urine in which albumen, blood, sugar, xanthic oxide, and oxalate of lime, are present. Numerous most admirably executed woodcuts illustrate the whole of this chapter.

The following extract from the section on Albuminous Urine will show how practically the whole of the subject of the urine is treated. Having pointed out the mode of detecting albumen by the aid of re-agents, Mr. Coulson proceeds thus :—

"Albumen may co-exist in the urine with blood globules, fibrin-globules, and pus globules, and neither of these can easily be distinguished except by the microscope. If, however, a portion of the urine, determined to contain albumen, be left at rest for twelve hours, sometimes a distinct line of red globules is discovered at the bottom of the vessel. This, however, happens only when the quantity of blood-globules is considerable." "The co-existence of fibrin with albumen cannot be discovered except by the microscope. When the fibrin assumes the forms of the urinary ducts of the kidney, albumen being at the same time present with or without blood-globules, it is a certain indication of congestion of the cortical structure of the kidneys, most probably connected with Bright's disease, or as a sequel to scarlet fever. When blood-globules are found without fibrinous casts of tubes, it is unlikely that the abnormal character of the urine is connected with congestion of the kidney. It is more probably the result of a calculus in the bladder, or some part of the urinary passages; and this conjecture will be confirmed, if crystals of uric-acid or oxalate of lime be discovered at the same time. When pus-globules are met with in the urine along with albumen, suppurative inflammation is certainly going on somewhere. If there be fibrinous moulds at the same time to be seen, the seat of the inflammation may be referrible to the kidney, being probably co-existent with Bright's disease. If no fibrinous moulds can be detected, it is not unlikely that a calculus has produced suppurative inflammation in some part of the mucous membrane. Fibrinous moulds, blood-globules, pus-globules, albumen and crystalline deposit, may all be discovered in the urine at the same time; and then it may be predicted that degeneration of the kidney, inflammation, and calculus will be discovered after death."

The second and third chapters are occupied with a consideration of irritability and spasm of the bladder. The fourth is on paralysis of the same viscus. Paralysis of the bladder may arise, our author says, from loss of muscular force, when the same force is lost generally from the exhausting effect of chronic general disease, *e.g.*, phthisis, from over distension, from loss of power in the nerves supplying the muscular coat of the bladder, either limited to that organ or as part of a more general paralysis, namely, paraplegia. In old age the difficulty of evacuating the bladder is due, not to paralysis of the organ, but to mechanical obstacles to the exit of its contents. Irritation in a distant part may cause paralysis of the bladder, *e.g.*, teething. A very full account is given of all the modes in which compression may be exercised on the neck of the bladder, and so a necessity for the interference of the surgeon be produced. The five succeeding chapters are devoted to a description of the symptoms, pathological lesions, and treatment of inflammation of the bladder, under the following heads :—Acute and Chronic Inflammation of the Mucous Membrane of the Bladder; Acute and Chronic Inflammation of the Muscular Structure of the Bladder; and Inflammation of the Peritoneal Coat of the Bladder, and of the Subjacent Cellular Tissue; Malignant Diseases of the Bladder; Hard and Soft Cancer; and Tuberculosis, occupy the tenth chapter. Passing by these, which well deserve the attentive consideration of practical men, but scarcely admit of abstraction, we come to a chapter on Abnormities of the Bladder.

"Abnormities of the bladder may be either congenital or acquired. The former are always dependent upon some irregularities in the law of fœtal development, by which the cavity of the bladder is generally left incomplete, the opening being either in front, through the abdominal walls, or behind, communicating with the rectum. The former is the more common, and the only congenital deficiency," Mr. Coulson says, "with which I am practically acquainted. Fissure of the anterior part of the bladder, and of the abdominal walls, produces, by the escape of urine over the person,

great suffering and annoyance, which, by the proper adaptation of instruments, may be alleviated."

Imperfection in the lower part of the abdomen may be confined to the want of union of the pubic bones, the bladder being entire. Cases of this kind are quoted by our author from Mr. Mayo, of Winchester, and M. Vrolik. With reference to the propriety of the operations performed by Mr. Lloyd and Mr. Simon to close the aperture in the anterior wall of the abdomen, and open a passage for the urine through the rectum, Mr. Coulson remarks :—

"We cannot, however, conceal from ourselves that these operations, undertaken solely to relieve a patient from inconvenience and deformity, are extremely hazardous to life; and perhaps it may be a question whether other evils, equally severe, might not arise from the permanent irritation caused by the presence of acrid urine upon the mucous membrane of the rectum, and by its mixing with the fæces."

Deficiency in the posterior wall of the bladder is accompanied by fissure of the rectum, and the formation of a common cloaca. Another abnormity of the urinary bladder described by our author arises from the permanent patency of the urachus. If it be open through its entire length, then

"The patient, upon attempting to expel the urine, finds some of the fluid escape by the umbilicus. The integuments in front of the abdomen are somewhat excorjated; the umbilicus is red, and presents at one spot a prominent red papilla or elevation, in the centre of which is an opening through which there is always a discharge of pus or mucus, and occasionally, during the day, of urine. A probe passes readily downwards in the direction of the bladder."

With reference to the sacculated bladder, Mr. Coulson says—

"It is formed in consequence of some obstruction in the urethra to the flow of urine, causing hypertrophy of the muscular coat of the bladder. The mucous coat insinuating itself into the interspaces left between the thickened muscular bands, yields to the pressure when the bladder contracts, and becomes by degrees forced outwards, so as to form a pouch or bag."

The number of the pouches thus formed in the same bladder varies much. Platner saw one having thirty-nine sacs attached to it, each sac containing a calculus.

"I have seen," says Mr. Coulson, "others similar in character to that described by Platner. In most instances it is on the posterior surface of the organ, or towards the fundus, that these sacs form; and on examining the preparations preserved in anatomical museums, we find the neck and anterior part of the bladder rarely so affected."

The consequences of sacculated bladder are serious. The saculi having no muscular coat, the urine cannot be expelled from their interior. The urine retained in them may become fetid, and give rise to abscess between the walls of the organ. "If the sac be large and distended with urine, it may excite many of the symptoms of retention." Of course the introduction of a catheter into the bladder itself affords no relief, unless by accident it find its way into the orifice of the sac. This chapter is the most complete surgical account of abnormities of the bladder with which we are acquainted.

The twelfth chapter is devoted to the consideration of Wounds and Injuries of the Bladder. Speaking of vesico-vaginal fistula, Mr. Coulson says—

"When there is not much hernia of the bladder, we may attempt to remove the callous edges, and unite them by the assistance of sutures. I do not agree," he continues, "in the statement, that it is better not to attempt too much in any one operation for fear of being altogether foiled. In many instances the edges brought together by suture have united in the course of a day or two, either completely, or to such an extent as to relieve the patient in great part of her distressing symptoms."

For those cases in which either the magnitude or the situation of the opening forbid an operation, Mr. Coulson advises the employment of a well-adapted truss. Of the advantage to be experienced from surgical interference in a large majority of these distressing cases, our author expresses himself as fully satisfied.

Hernia of the Bladder occupies the thirteenth chapter; the subject is treated at considerable length. The six succeeding chapters are devoted to the subject of Calculi, in the following order:—The Chemistry of Urinary Concretions; the Causes of Stone; the Symptoms of Stone in the Bladder; Lithotomy; Lithotrity; Lithotomy and Lithotrity; and Solution of Stone. The chemistry of the urinary concretions is given by Mr. Coulson at considerable length. The description of the physical characters of the different varieties of calculi is extremely good and clear. With reference to the causes of stone, Mr. Coulson remarks :—

"The doctrine of the metamorphosis of living tissues by the agency of oxygen, has served in no small degree to improve the general etiology of calculous complaints. It is undeniable, that by the agency of oxygen and water the component textures of the living body are unceasingly changed into urea and uric acid, together with carbonic acid. It seems equally certain that the proportion of urea is great and uric acid small, when this process takes place under a free supply of oxygen; that is, in proportion to the activity of the respiration at the time there is a large proportion of the soluble product of this metamorphosis generated, and a small proportion of the sparingly soluble product."

Theory then leads to the conclusion, and experience confirms its truth, that imperfect respiration is a most efficient cause of the production of uric acid calculi.

"If we adopt Liebig's views," Mr. Coulson goes on to remark, "oxalic acid represents a portion of the urea which should be derived from the metamorphosis of the living tissues when the supply of oxygen by respiration fails, the failure not being to so great an extent as when a superabundance of uric acid appears in the urine."

The evidence as to the influence of climate, of age, and of diet, in the production of calculi, is given at some length.

After a careful description of the symptoms of stone in the bladder, Mr. Coulson enumerates the following as the circumstances which may prevent the presence of the stone being proved by the employment of the sound :—

Sacculation of the bladder; the existence of an excavation behind or on one side of the prostate in which the stone may lie; the presence in persons of advanced years of a secondary cavity occupying the fundus of the bladder, bounded above by the prostate, behind by the orifices of the ureters and the intervening portion of the parietes of the bladder, in which the stone may be firmly fixed. This condition is generally accompanied by ulceration of the coats of the bladder; or the stone may be, as it were, pinched between two folds of the bladder, or contained in a *cul-de-sac*.

Under the head of lithotomy, Mr. Coulson gives a full description of the three operations which have been recommended for the removal of calculi by the aid of the knife, viz., the high operation, the recto-vesical operation, and the lateral operation.

The first should be, in the opinion of our author, limited to those cases in which the pelvis is so deformed that the proper incisions cannot well be made in the perinæal space. The second has been discarded by general consent; the objections to it are succinctly given. The lateral operation has superseded every other method of extracting calculi from the bladder.

"I have," says Mr. Coulson, "performed it at all ages, from 18 months to 80 years."

He dwells much on the propriety of preparing the patient for the operation.

"I generally give," he continues, "on the night preceding the operation, a few grains of hydrarg. c. cretâ, with the pulv. rhei., and some castor-oil on the following morning. Two clysters should be given before the operation—one two or three hours after the castor-oil, composed of gruel, olive oil, and salt; and the other about an hour before the operation, consisting of common gruel, with 20 or 30 drops of laudanum in it."

The operation must never be undertaken till the last injection has come away.

The description of the operation itself is evidently that of a thoroughly practical man. Some surgeons recommend that the patient should be tied before the introduction of the staff, that there may be no escape of urine :—

"To this," Mr. Coulson says, "I object, because the introduction of any instrument along the urethra into the bladder is by no means so easy when the thighs are flexed upon the abdomen, as when they are in their usual position."

Mr. Coulson advises the staff to be confided to the care of an assistant, and directs that the handle be inclined a little towards the ground. The advantage of this mode of proceeding is, that when the surgeon has cut into the groove of the staff, there is no occasion to alter the position of the

instrument, and that the fore-finger of his left hand is quite at his disposal for protecting the rectum and guiding the knife:—

"I commence," Mr. Coulson continues, "the first incision rather low, about two fingers'-breadth above the anus, by which precaution the bulb of the urethra will be avoided."

Mr. Coulson reprobates the employment of the staff for the purpose of a guide or support to the first incision:—

"The use of the staff may be defined to be that of conducting the knife along its groove from the membranous portion of the urethra through the prostate and into the bladder."

The membranous portion of the urethra is opened by Mr. Coulson with a common scalpel:—

"I then take a long straight knife, with a knob at its point, and convey it along the groove of the staff till it reaches the bladder, dividing in its course some of the anterior fibres of the levator ani, the lateral and lower part of the prostate, the capsule of which must be left entire. I then withdraw the knife in the direction of the external wound, and introduce the left fore-finger into the bladder."

The following are the causes of death after the operation for stone:—

1st. Collapse, the patient dying without any obvious morbid change to account for the event.
2nd. Peritonitis.
3rd. Hæmorrhage.
4th. Sloughing of the pelvic cellular membrane.
5th. Phlebitis.
6th. Previous disease of the kidneys.
7. Inflammation of the mucous membrane of the bladder, ureters, and kidneys.

Death from collapse, Mr. Coulson thinks, has been less common since the introduction of the use of anæsthetics. Very few cases of peritonitis have fallen under our author's own observation. The same may be said of phlebitis. Infiltration of urine, with its consequences, is generally, he says, the result of a too free division of the prostate gland.

"In my experience," Mr. Coulson says, "dangerous hæmorrhage is not a common occurrence after the lateral operation of lithotomy. In young subjects, the arteries are generally small. In old men, the veins about the prostate may pour forth a considerable quantity of blood; but the liberation of the patient from his constrained position, and the application of cold, usually suffice to arrest the bleeding. The artery of the bulb should not be wounded."

No care can secure the patient from hæmorrhage, if the internal pudic artery is the subject of irregular distribution.

Lithotrity, the mode of its performance, the dangers that attend it, are fully described; and the comparative advantages of lithotrity and lithotomy are well put.

Mr. Coulson has seen great benefit, in some cases, from the injection of certain salts into the bladder, for the purpose of dissolving phosphatic calculi by double decomposition, as recommended by Dr. Hoskins, of Guernsey.

The four last chapters of the work before us are devoted to diseases of the prostate gland, viz.: its Acute Inflammation, Chronic Enlargement, Malignant Diseases, and Prostatic Calculi. Want of space prevents us from extracting any portion of this part of the work.

In a few words, Mr. Coulson's work may be stated to be full and practical, to fill a vacant space in medical literature, and to be highly valuable to both students and practitioners.

We cannot conclude our notice without bestowing a word of praise on the Table of Contents and the Index; they are really models of what they ought to be, and will spare those who desire simply to consult the book much unnecessary labour.

Sketches of Brazil, including New Views on Tropical and European Fever. By Robert Dundas, M.D., Physician to the Northern Hospital, Liverpool, &c. London: Churchill, 1852. Pp. 449.

The object of this Work is to explain the opinions of the Author on the subject of fever. Those opinions are twofold. First, Dr. Dundas believes, that all types of fever are identical; that no distinction can be drawn between typhus, typhoid, and relapsing fever, but that these so-called distinct diseases are merely phases or modifications of one single, though variable disease. Dr. Dundas's arguments in favour of this statement are, however, very vague and unsatisfactory, and consist chiefly of indefinite assertions, and of comments upon two or three writers on fever, which are not in any way convincing to our minds.

"In the first place," says Dr. Dundas, "the greater number of the distinctions in the symptoms attempted to be established between these fevers are obviously either trivial or visionary—distinctions without a difference; and however broadly they may be defined in the closet, I have never met with a physician who could conclusively verify them at the bedside of the patient, although I have witnessed these diseases in this country, in Ireland, and in different quarters of the Continent."—P. 23.

Dr. Dundas has been exceedingly unfortunate in his intercourse with physicians. We could not have supposed it possible that such a statement could be deliberately made. For our own parts we can only say, that, in London, if not in Liverpool, Dr. Dundas would find many physicians who would demonstrate to him at once these distinctions he finds so inappreciable. Nay, more, the very nurses in our hospitals find no difficulty in distancing Dr. Dundas in diagnostic tact. A short time ago, we had occasion to pay a visit to the London Fever Hospital, and while passing round the wards with the talented medical officer, Dr. Sankey, we learned that the nurses were constantly in the habit of making the diagnosis between typhus and typhoid fevers, and that they knew perfectly well when the eruptions might be expected to appear and to disappear. Whether typhus and typhoid fevers may pass into each other is another question, but that the distinction between the two can often be made at the bedside is a most undoubted fact, and, if medical men will not learn how to do so, they may expect that the eyes even of old women will prove better than their own.

"As regards the character of the eruption," says Dr. Dundas, "so constantly insisted on, nothing, I believe, can be more fallacious; for I have myself more than once witnessed every variety of eruption, pretty distinctly marked, in same patient at one period or other of his disease, and practitioners who have seen much of tropical fevers must have observed the occasional appearance of all the eruptions commonly deemed pathognomonic of special forms of European fever."—P. 23.

Dr. Dundas's experience of the eruptions is so entirely opposed to our own, that he must pardon us if we demand stronger proofs than that he has seen such and such a thing "more than once." As to the existence of eruptions in tropical fevers, we can only say, that, after some study of tropical intermittents, and of some of the severest forms of congestive remittents, we have never seen any true eruption at all. Various shades of yellowness, and of dark redness, from cutaneous congestion, are often observed, but no eruption in the sense in which that word is applied to the appearance of the skin in typhus or typhoid fevers.

Dr. Dundas's second creed is, that there is no such entity as marsh malaria; that marshes have, in fact, nothing to do with ague; and that the real cause of intermittents and remittents (and, carrying out the views of our author, of continued fevers also) is exposure to cold sea air.

We are compelled to differ here also with Dr. Dundas, and to believe that, however clever and ingenious his chapters on this subject are, he has by no means even shaken, much less destroyed, the ordinary opinions on this subject. The *positive* evidence of the influence of marshes is passed over, and he makes the most of those apparently exceptional cases where the origin of the miasm is not obvious, (probably from our ignorance of all the conditions of origin,) or where the action of the miasm—in obedience, no doubt, to certain as yet unknown properties or influences deviates from its ordinary course. Dr. Dundas also assembles all the discrepant opinions he can find in authors, although many of these are really immaterial to the main question; and others are the statements of men who have observed loosely and recorded inaccurately. But this subject is too vast for our pages, and we must content ourselves with a protest against Dr. Dundas's opinions.

In the latter part of the work is an account of the treatment so strongly recommended by Dr. Dundas in typhus, as in intermittents, viz., large doses of quinine. At present, it is necessary to collect evidence on this point. If it appear that Dr. Dundas's statements are correct, he will have conferred a great benefit on medicine. In several of the English writers of the last century and commencement of the present, the good effects of bark in some fevers are noted, and the use of quinine in erysipelas of the head and face is well known.

Although we have thus felt it our duty to dissent from Dr. Dundas's views of the relations of continued fevers, and of the causes of intermittents, we cannot quit the book without stating that it is written with great ability. We have read it with much interest, and have gathered from it many valuable facts. There are some interesting observations respecting Brazil and the condition of the Profession there; and throughout the whole work there is abundant evidence that Dr. Dundas is a physician of learning and of superior attainments.

The Druggists' General Receipt-book. By HENRY BEASLEY. Second Edition. 12mo. Pp. 460. London: Churchill. 1852.

This book comprises veterinary formulæ, numerous recipes for patent and proprietary medicines and druggists' nostrums; perfumery and cosmetics; beverages, dietetic articles, and condiments; and trade chemicals. In an Appendix are a variety of most useful tables, *e.g.*, foreign weights and measures; comparison of thermometrical scales, ect. As little more than two years have elapsed since the publication of the first edition of this work, the call for a second edition shows that it has been generally well appreciated. The arrangement of the multitude of recipes given is such that any given one can be readily found. Although called a Druggists' Receipt-book, it will be found highly useful to professional men. Who has not needed occasionally to know the composition of some of the poisonous trash sold under the name of patent medicine, if only for the purpose of curing the disease induced by their use? while many of the recipes will be found practically useful, *e.g.*, those for disinfectants. We recommend Mr. Beasley's book as one of the best of its class.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM JOURNALS.

SIMPLE CUPPING INSTRUMENT.

AT a recent meeting of the Suffolk District Medical Society, Dr. Gould exhibited a new instrument for cupping, formed of a thick, firm, hollow, India-rubber ball cut in half. In applying it, all that is necessary is to place the concave surface on the part that is to be cupped, and press down the centre to exhaust the air, after which the fingers may be taken off, and the ball will be found to adhere—and quite firmly, too—by means of the vacuum created. For all the ordinary purposes of cupping, this simple contrivance will be found most effectual, and particularly in dry cupping. It has advantages over glass cups, either with or without the pump, and the cost of a dozen of them would not exceed a dollar; besides, there can be no breakage, or liability to get out of order, nor is anything required to exhaust the air from them, save the pressure spoken of when they are applied. To the country practitioner, who cannot always have leeches at his command, this simple and cheap substitute will be most acceptable.—*Boston Medical and Surgical Journal.*

FIBROUS TUMOUR OF THE UTERUS.—EXTRACTION DURING DELIVERY.

The following case is perhaps the only one on record in which a tumour occupying the uterus and impeding parturition was extracted after the commencement of delivery.

M. Danzan was called on to visit a female who appeared to be in a critical state. She was in the 30th week of pregnancy, and had been losing blood from the vagina for the forty-eight hours. The movements of the child had ceased since the rupture of the membranes.

On examination a large tumour was found, filling nearly the entire vagina. It was round, and not very firm. It had never produced any troublesome symptoms, and had not been discovered by the medical man who examined the patient at the commencement of her pregnancy.

On consultation with M. Dubois, it was resolved on making an attempt to extract the tumour, which evidently rendered delivery impossible. The tumour was divided by a transverse incision, and after some difficulty the operator succeeded in getting his fingers behind the segments, so as to embrace the whole in his grasp. This done, the tumour was extirpated without any further impediment. It was now found that the child presented the head, together with the hand and foot. Turning was therefore had recourse to, and the case terminated in a favourable manner.—*Bulletin de l'Académie.*

INTERNAL INFLAMMATION COMBATED BY COLLODIUM.

M. Latour has been, for some time back, the persevering advocate of the doctrine, that external inflammation may be speedily subdued by withdrawing the affected surface from the influence of the air. This he obtains simply by a layer of collodium, which (according to M. Latour) rapidly assuages the inflammation of gout and articular rheumatism. At the meeting of the Academy of Medicine, on the 8th, M. Latour related a case of peritonitis, in which the symptoms were dissipated within twenty-four hours by the application of a layer of collodium to the whole surface of the patient's abdomen —*Ibid.*

HOMICIDAL MONOMANIA.

M. Brierre de Boismont relates the following interesting case:—Madame X., aged 25 years, six years previously had had some transient attacks of an urgent desire to commit murder. Just before M. de Boismont saw her she was seized with a great aversion to her husband and child, and with an irresistible desire to kill them with a hatchet. She was taken without trouble to an asylum, and there related without difficulty, but with paroxysms of grief, the ideas which possessed her. There was neither hallucination nor delusion. When she was at work she was gay and unconcerned, but if the idea of murder crossed her mind her countenance at once altered, and she seemed to brood over all possible means of satisfying her desire. When M. de Boismont asked if she wished to injure him also, she replied, "Had I a knife or a hatchet, I would spare you as little as any one else." Shortly afterwards she was seized with a paroxysm of nymphomania; her imagination was filled with licentious images, and she wished to strip herself naked. This gradually disappeared, as also did the desire to murder, and finally she became perfectly sane. M. de Boismont alludes also to another case of the same kind, where the intellect was otherwise so perfect, that a stranger could not conceive there could be any reason to detain her in an asylum.—*L'Union Méd.*

ACID IN THE LUNGS.

M. Verdeil has discovered that in the pulmonary parenchyma of many animals an acid is secreted which is crystallizable, and forms crystallizable salts with alkalies. It is very soluble in water and boiling alcohol; insoluble in cold alcohol and in ether. It refracts the light powerfully, loses no water of crystallization at 212°, crepitates and decomposes at a higher temperature, and disengages empyreumatic odours; it decomposes carbonates, and appears to exist in the lungs both free and in combination with soda. It contains carbon, hydrogen, nitrogen, sulphur, and oxygen in definite proportions, which are not stated. M. Verdeil believes that it plays an important part in respiration.—*L'Union Méd.*

THE SPIROMETER.

Dr. Radcliffe Hall has made a number of interesting observations with Hutchinson's spirometer, which are of practical interest. The general result is to confirm, in the main, Hutchinson's statement, yet to allow a wider deviation from his standard of healthy "vital capacity" than he has done, and also to show that the size of the chest and mobility of the ribs exert a greater influence than has been supposed. In estimating the significance of the vital capacity, both size and mobility must be taken into account. If a large chest coincides with a large mobility and a low vital capacity, the circumstance is suspicious; but a deficient vital capacity indicates probably nothing, if the thoracic mobility be at the same time normally small; the only exact standard of vital capacity for any individual is his own normal capacity when in health, and as this can rarely be ascertained, the deviation of the vital capacity from the arbitrary general standard should not be too much insisted upon.—*Transactions of the Provincial Medical and Surgical Association.*

THE ABSORPTION OF INSOLUBLE SUBSTANCES.

Oesterlen made some experiments a few years ago to demonstrate the absorption into the blood or chyle of substances absolutely insoluble, such as charcoal and Prussian blue. In 1847, Eberhard made a number of similar experiments, which were published in his inaugural dissertation. In 1848 Aldus Mensonides published an inaugural thesis on the same topic, which has been translated by Donders. The dissertations of Eberhard and Donders are published in *Henle's Zeitschrift*, and we extract the most important parts of these interesting memoirs.

Eberhard employed in his experiments mercury, charcoal, and sublimed sulphur. Kölliker and Meyer witnessed and confirmed most of his experiments. The first part of the paper is occupied with a description of the microscopic characters of the three substances above-named, with a view to their recognition in the

system. For these particulars we refer to the paper itself. Rabbits and dogs were fed with these substances, and after a certain time were killed, or the mercury or sulphur were rubbed into the skin. Particles of the substance administered by the mouth or rubbed into the skin were detected easily with the microscope in the chyle and blood. The fact being established, that "insoluble substances can pass unchanged through the intestines or the skin into the blood," the inquiry is made, how this takes place. Solution and re-precipitation is impossible; and, after some discussion on the point, Eberard concludes, that these bodies actually do pass through the coats of the vessels in the solid form. And it appears possible that this occurs from the small particles pressing against the thin walls of the capillaries, and the delicate coverings over them, and thus making their way in.

The experiments of Mensonides and Donders were made with mercury, sulphur, charcoal, and starch. Altogether the observations are not so decided, as far as the three former substances are concerned, as we should have expected from the strong statements of Eberhard. The mercury in the form of mercurial ointment was rubbed into the skin of rabbits, and, after death, in the lung and liver, and (in one of three experiments) in the blood, globules were seen which might have been mercury, but which could not be proved to be so with absolute certainty. Sections made through the skin did not display any trace of mercury in its substance on microscopic examination. Flowers of sulphur were administered by the mouth to a rabbit and to three frogs. In the blood of the rabbit particles were found which might have been sulphur, but were in very small numbers, and could not be further examined. The experiments on the frogs were negative.

The fine powder of wood-charcoal was then used, as in the original experiments of Oesterlen. Rabbits were fed with it, and charcoal particles were found in great numbers in the blood, and generally in the substance of the lungs and liver. They existed in the lungs in the connecting tissue between the air vesicles; in the liver they were in smaller quantity. The experiments of Oesterlen and Eberhard were then perfectly confirmed. Still something more seemed necessary. The little particles were considered to be charcoal, simply from their form, and not from their chemical reactions. Donders and Mensonides decided on using starch, the little granules of which have a decided and incontestable re-action with iodine. Starch was mixed with charcoal, and given to frogs, the customary martyrs of science, and the granules were afterwards found in the mesenteric veins, and gave the usual re-action; they could be seen to move with the blood-corpuscles, and to press against these. In another experiment, after many failures, starch-granules were most clearly seen in a mesenteric vein, were coloured with iodine, were decolorized by the continual flow of the alkaline blood, were again coloured by a fresh addition of iodine, and so on for many successive times.

These experiments were so far quite decisive, and Donders proceeds to propose some new questions of great importance. As insoluble particles can thus find their way into the blood, do they enter at once into the blood-vessels, or into the lacteals and lymphatics? Does the entrance occur in all animals? Is the form of the substance, or is its nature, of consequence? Can diseases arise in the lungs by the aggregation of such molecules? Are any special diseases produced in various parts by their entrance and aggregation? Do such diseases disappear when the importation ceases? Donders, on the present occasion, discusses only the first question. He remarks that the observations of Herbst have already made it probable that starch granules pass into the chyle. Oesterlen and Mensonides, however, could find no charcoal grains in the mesenteric glands or in the thoracic duct. The experiments of the last observer were, however, not absolutely exclusive of the possibility of the passage into the chyle, as the lacteals were only quite clearly seen in one experiment. In spite of these negative observations, Donders thinks it probable that the channel of entrance is the lacteal system rather than the blood-vessels. The chief positive argument for this is the abundance of charcoal grains found in the lungs, compared with their scanty appearance in the liver; yet, if absorbed by the portal veins, one would expect to find the liver the chief depository. Schroeder van der Kolk has suggested, indeed, that the numerous granules of charcoal seen between the pulmonary air-cells might actually be contained in the lymphatics, ramifying in that situation. The mode of entrance is, however, still obscure; the matter of fact appears undoubted, that insoluble particles can pass into the circulating system, and can become aggregated in particular localities. Both Eberhard, Mensonides, and Donders experienced the greatest possible difficulty in keeping the observations free from falsification. Charcoal and starch find their way everywhere. Mensonides and Donders found that their solution of iodine frequently became contaminated, and they were even led at one time to believe that starch granules exist in healthy human blood, simply from starch granules having found their way into their test solution. In repeating the experiments it is necessary to be aware of the difficulties and sources of fallacy thus arising.—*Henle's Zeitschrift, Neue Folge*, 1851. Vol. I., p. 106.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

ROYAL SOCIETY.

THE *séances* of this learned body have been unusually attractive this winter. Some evenings ago, Professor Bennett read a paper "On the Function of the Spleen, and other Lymphatic Glands, as Secretors of the Blood." Among other interesting conclusions at which Dr. Bennett arrived, were the following:—That the blood was to be considered as a secretion from the lymphatic glands, the system of which was, in mammalia, composed of the spleen, thymus, thyroid, supra-renal, pituitary, pineal, and general lymphatic glands; that, in certain morbid states of these glands, their cell elements, which in mammals are free nuclei, are multiplied, and, being so, are discovered in the blood, in which they are known as the colourless cells. This constitutes the leucocythemia of Dr. Bennett.

At an earlier period of the session, Dr. Alison read a supplemental paper on "Vital Affinity," in which he defended the doctrine, in reply to the objections recently brought against it by Humboldt and Dr. Daubeny.

HOMŒOPATHIC PETITION AND THE POLISH BROTHERS.

As was to be expected, the monster Homœopathic Petition, the prayer of which was to coerce the consciences of the Edinburgh Professors, has died a natural death. Delivered to the patrons, it was with due discretion forwarded by them to the Senate; and, unnoticed by the Professors, it appears to have only received the dignity of a new envelope, and to have been returned to the Council chambers. Whether it has so much as obtained a decent interment we know not, but, as was proper in a case of so sudden decease, there was instituted a *post-mortem* examination, for an account of the more interesting features of which we are indebted to the conductors of the *Monthly Journal*. To it we must refer those who desire to be made acquainted with the whole anatomy of the monster. Suffice it here to say, that the examination by the *Monthly* revealed such an amount of disease as to cause us to wonder how the petition survived the agonies of birth without the attendance of an allopathic accoucheur, and the due administration of chloroform. Out of this homœopathic petition there has originated a rather amusing episode. No more curious or more malignant appearance was detected on the examination than the signatures of two expatriated Poles, who had been educated by the medical faculty, and exempted from all University fees. The reference made to their undutiful conduct seems to have carried conviction to the hitherto obdurate hearts of the Polish brothers; and within the last few days Dr. Dionysius Wielobycki has waited in person on the respective members of the medical faculty, and in his own and his brother's name sought to restore the filthy lucre to their generous instructors. What was the result of all his different conferences has not transpired; but from at least one member of the faculty he met with a rather warm reception. That Professor refused the proffered 10*l.*—we trust told the offerer that all the tens he may ever make, if given to the University, could never repay the debt he owes them—whereupon, *on dit*, a scrimmage ensued, Dr. Dionysius beating a retreat with the two fives sticking in the collar of his surtout. From that position, before his complete ejection, he managed their extraction, and by a dexterous manœuvre continued to leave them in the Professor's house, though not in his hands. But a short period, however, elapsed, before the sum was again at Dr. Wielobycki's disposal, when, probably feeling his case hopeless, he determined not to recommence hostilities, and wishes it to be known, that the Homœopathic Dispensary has benefited by Professor S——'s refusal. This we shall verify on the appearance of the next report of that infinitesimal institution.

ROYAL MEDICAL SOCIETY.

An extraordinary meeting of this time-honoured Society is to be held on the evening of Monday, the 8th of March, for the purpose of considering a proposal to purchase the tenement, No. 7, Melbourne-place, George the Fourth's Bridge, as the new hall for the Society. As this proposal has the unanimous sanction of the

"New Hall Committee;" and as the building is in every respect convenient, and the situation unexceptionable, it is probable that the Society will at once acquiesce in the proposal, and that the purchase will be immediately effected. The subscription list for the new hall still remains open, and additions to it will be thankfully received by Mr. Macfarlane, the treasurer of the Society.

GENERAL CORRESPONDENCE.

REMARKS ON CALCULI.

[To the Editor of the Medical Times and Gazette.]

SIR,—It was my expectation that the facts briefly but distinctly stated in my last communication, would have been found sufficient to involve what I regard as the true explanation of the nature of the so-called cell-wall, in perfect accordance with our present views; but, as Mr. Quekett states that he does not understand my statements, I will endeavour to be more explicit.

The two experiments already detailed by me will convince any unprejudiced observer who repeats them, that we have as much of the same kind of evidence as that adduced by Mr. Quekett, of the existence of a cell-wall in those concretions which have been raised to a heat capable of destroying all organic matter present, as in those which are examined by the same means in their natural state. The cell-wall, as it is called, differs in appearance in no respect in the one case from that in the other. Hence, as we know that it cannot exist in the latter instance, the evidence must be fallacious.

If some crystals of lithic acid, precipitated from filtered urine, be placed in a watch-glass, some dilute solution of potash be added, and the mixture be kept in gentle motion, in a short time the margins of the crystals will become paler and more transparent, and somewhat rounded off, unless the action be very slow; the paleness and transparency gradually increasing, according to the length of time during which the action of the potash is allowed to continue, until at last, the central darker portion of the crystals entirely vanishes. By removing the solution of potash at the proper period, the size of the nucleus may be regulated at will. Upon examining a specimen of lithic acid thus treated, we see palish cell-like bodies, mostly with a single apparent nucleus in each, of various sizes; some, however, representing a simple cell.

Now, this very curious experiment forms the key to the explanation of the nature and formation of the so-called cell-wall in other cases. It shows that the bodies under examination consist of the same substance or substances in two different states, probably of molecular aggregation merely. The concretions from the horse show the same thing, whether they have been heated or not. Hence, in the latter case, the organic matter cannot play any essential part in the phenomenon. The apparent cell-walls consist of different chemical substances in each case, but the components of both cell and cell-walls, are the same as those of the nucleus in each case respectively. The same appearances of cell-walls, as those in the carbonate of lime, may be seen in the dumb-bell crystals of the oxalate of lime, and in the globular lithates; both those found naturally in the urine, and those formed in this fluid by keeping.

Now, I regard the apparent cell-walls remaining after simply treating the concretions from the urine of the horse with dilute acid, as corresponding with those of the uric acid; they form, so to speak, skeletons of the crystals or bodies. They are not cells but spheres. The transparency they acquire under the action of acids bears no resemblance to that acquired by true organic cells; they become transparent simply from the removal of the more soluble portion of their substance, as in the uric acid; and this process affects equally the nuclei (!) and nucleoli (!) as the cell-walls.(a) The following experiment will afford convincing proof that this is the true view of their nature. If one of the larger spherical concretions from the urine of the horse be selected, in which the centre of the crystalline structure coincides with the centre of the sphere, and be acted upon by dilute acid until almost the whole of the crystalline structure be dissolved, leaving only a minute spherule in the centre, and this be now set in motion by inclining the body of the microscope horizontally, as the sphere is rolling over and over, we may obtain complete conviction that the minute spherule is fixed by some means in the centre of the sphere,—a fact which is conclusive against the idea of its being a little spherule of carbonate of lime, lying loosely in the cell, as it ought to have been if the concretion had consisted simply of a cell-wall filled with inorganic matter. If the undissolved nucleus were attached to the wall of the cell,—the only other means by which it could retain a definite position,—its position when in motion would appear eccentric, which is not the case.

In almost all calculi, when divided, we find concentric appearances, darker and denser concentric lines; these correspond in non-alternating calculi to differences in the amount of colouring and other organic matters thrown down with the calculous matter. Here, again, we meet with the substances in the two different states, but from a different cause; hence we should expect to find an appearance of cell-structure on treating them with slowly acting solvents, the more resisting layers forming apparent nuclei, nucleoli, &c.; but in the larger concretions, or calculi of lithic acid, which is the most common constituent of urinary calculi, I have been unable to procure any evidence, by the action of solvents, of anything which could be interpreted to be a cell-wall, although on treating them with potash I have again met with the unequal action described above. I need not state, that the admixture of the matters forming gravel and calculi with the colouring and other matters of the urine, frequently modifies their properties in a considerable degree; thus oxalate of lime, which when pure is pretty readily soluble in dilute nitric acid, is by no means so readily dissolved, even by the strong acid, when examined as it occurs in calculi. Hence we have two causes of the unequal action of solvents upon calculi; 1st. An alteration in the state of molecular aggregation; 2ndly. Combination, or rather, more probably, mere admixture with organic matters.

If we examine a calculus composed principally of inorganic compounds, as to the presence of organic matter in it, we find this present in every part; hence if the microscope, or simple inspection by the unaided eye, leads to the conclusion that organic matter is only present in particular parts, this conclusion must be based upon error; but in all those calculi which I have treated with acids, and in which any resemblance to a cell-wall appearance has been produced, this "skeleton structure" was also very distinct.

The remarks made in my paper upon the lithates, in regard to their artificial introduction into cells, when brought into relation with the question of the cell-formation of calculi, would form a new point to be decided in regard to this view; for supposing that calculi had been proved to be invested with a cell-membrane, the new question would arise—are the contents of the cell the products of secretion or otherwise?

There is yet a third source of the contents of cells, which may be alluded to here, although it does not directly bear upon the present question, namely, the metamorphosis within the cells of substances separated from the blood by the process of secretion. Hence the contents of a cell may be products of the metamorphosis of secreted substances.

Two conditions appear requisite for the production of a urinary calculus; the first, the formation (which is always an accidental occurrence) of a nucleus,—this may consist either of one or more of the natural constituents precipitated from the urine, or of some foreign body which has gained admission into the urinary passages; the second, the precipitation of some normal or abnormal components of the urine in the urinary passages. The latter phenomenon is generally produced by the existence of some diathesis. If once the nucleus be formed, that matters precipitated from the urine will be deposited upon it needs no proof on my part; it is an established occurrence. The existence of a diathesis gives rise to a precipitation of some of the constituents, according to its nature; and I have observed, and the fact has been recorded by others, that in many cases where a calculus has been recently passed from the kidney, gravel of the same composition as the calculus has been passed both before and after this event; showing that the cause, both of the formation of the nucleus and of its increase by deposition, had been and were at the time still in existence. When the calculus reaches the bladder, if the amount of irritation produced in this viscus by the presence of the foreign body should cause the formation of morbid mucus sufficient to set up the phosphatic decomposition or fermentation of the urine, the peculiar state of this secretion connected with the existence of the original diathesis will be destroyed, and the phosphates will be thrown down instead of the original components of the calculus; while, if this be not the case, deposition of the primary constituents will still continue.

That calculi are comparatively rarely formed, while gravel is common, is what we should expect, because the amount of gravel

(a) If the reader will refer to the Eighth Volume of the *Edinburgh Monthly Journal of Medical Science*, he will find an admirable description, by Professor Bennett, of some peculiar bodies from the brain, which beyond any doubt did consist of inorganic matter, surrounded by an organic cell-wall or capsule. They form a strong contrast with the bodies under consideration.

in any urine bears a very insignificant proportion to that of the liquid, which thus washes it away.

That calculus is more common in some countries than others, is in accordance with the fact, that certain diatheses, dependent upon the habitual use of particular kinds of food, etc., which cause the precipitation of certain constituents of the urine, are more prevalent in some countries or districts than in others.

That the lithates should but rarely compose calculi, either entirely or in part, is no matter of astonishment, considering their great solubility; for, although copious deposits of the lithates are frequently found in the urine when cold, it must be borne in mind, that these lithates generally exist in the urine, in a state of solution, so long as that secretion is contained within the body.

Calculi of the urates are but rarely met with, and, when this is the case, they are principally found in children. Now, we know, by the examination of urinary deposits, that it is principally in children that we meet with the globular or crystalline lithates. Hence there is a particular tendency in the urine of children to the deposition of the lithates in the form of calculus,—for the globular crystalline aggregations of the lithates are, in fact, minute calculi. On a future occasion, I shall detail some experiments upon this point, with a view to its explanation.

Hence it appears to me, that the cell-theory of calculi (which I find, by reference to my notes, was suggested in 1845 by M. Schlossberger) is no less unnecessary for the explanation of their formation than it is unsupported by exact investigation.

That the cells of the renal epithelium, when detached from their natural position, and filled with the products of their own secretion, may form, like any other foreign body in the urinary passages, the nucleus of a calculus, is quite intelligible, and in strict accordance with facts; but this appears to me the only part such cells can play in the process.

There is yet remaining what may be considered as the *experimentum crucis* in regard to this question. If calculi are formed in two ways, one by a process of cell-formation, the other by the simple precipitation from a state of solution,—in the first case, we should find the so-called cell-structures, but not in the second. I regret that, for want of materials, I cannot decide this point, but I anticipate that the cellular appearance will be met with equally in the first as the second.

A word more in relation to the deposit of carbonate of lime from the urine of the horse. I believe that this not only occurs naturally in the urine, but that it is also deposited from this secretion when kept; as, however, I have not expressly made the experiment, I leave the question open, but am almost certain that this is the case.

I am &c. J. W. Griffith, M.D., M.R.C.P., &c.

9, St. John's-square.

THE PHARMACY BILL.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have been much pleased with your remarks on this Bill, more particularly with the following sentence:—

"It requires no prophecy to perceive that ere long these vendors will not only prescribe over their counters, but will encroach on the domains of the prescribing general practitioners."

That the druggists as a body should undergo an examination and receive a certificate of qualification, I most strongly urge; that they should by penalty be restricted to their own legitimate business is equally evident; and no Act, either for their regulation or that of the Profession generally, can be complete without the introduction of a penal clause, to restrain them from visiting the sick. This I shall endeavour to make evident by the relation of two instances occurring in the practice of one druggist in this city.

Some short time since I was requested to visit a man with fever, the servant of a friend. I attended, and found that he had been ill a week, regularly visited by the druggist, who had supplied him with medicines, the labels being, not the ordinary shop labels, but the long slips of paper used in my younger days by the general practitioner; moreover, the patient spoke of him to me as Doctor ——.

On Thursday last, I was giving directions to this person in reference to a prescription, when a girl rushed into his shop,—"Please, Sir, that child is light-headed, and mistress will be glad if you will come directly." "Yes, I'll come," said he, and, turning to myself, observed, "The child has got gastric fever, and people expect remedies to act directly; I suppose I must go and see it." He then turned the conversation to a surgeon in the neighbourhood, and asked my opinion as to whether he (the surgeon) was justified in practising as an apothecary without being in possession of their licence. I explained to him the law on the case, and left the shop.

Now, Sir, am I, a practising physician, to turn informer in such a case as this? Am I, in pure love for my neighbours, to procure evidence to support a prosecution. No, Sir, the Act of 1815 is a dead letter, unless some aggrieved general practitioner puts it in force, to his own injury, from the gossip of a druggist's shop. What is wanted is a stringent clause, capable of being enforced by the magistrates, the case being under the management of the police, and not of the medical practitioner, acting by the advice of a solicitor employed by the Company. Until such a clause is introduced, the new Bill will, if passed into a law, actually legalise the practice of such men as these. If the Pharmaceutical Society is honest, they cannot object to the insertion of such a clause; if the Profession is true to its own cause, they will not allow such an Act to pass until it contains one. I am, &c.

Bath. James Tunstall, M.D.

P.S. I forgot to mention, that the parents of the child with "gastric fever" were quite in a condition to pay for the best medical advice.

THE INCOME-TAX.

[To the Editor of the Medical Times and Gazette.]

Sir,—The Income-tax is a source of great annoyance, and frequently of injustice, to medical men, especially to those who make an honest return of their receipts. So much depends upon the arbitrary dictum of the surveyor, and upon the position in which an appellant stands with regard to the Commissioner or Commissioners, that it is impossible that impartial and equal justice can be done under the present system.

It is hard, indeed, that incomes which are wholly dependent upon the capability of their producers to be constantly at work should be taxed at all; but it is doubly hard that the persons who pay tax upon such incomes should be at the mercy of parsons and squireens.

I am afraid it would be illusory for medical men to look forward for exemption from, to them, so unjust an impost; but, as it is probable some modification of the tax may take place before long, I think it is time we should bestir ourselves to endeavour to procure relief from the most galling provisions of the Act, and the anomalies connected with its administration.

I do not consider myself capable of deciding what ought to be the lowest sum of clear profit upon which a medical man should pay a tax; but of this I am quite sure, that it ought to be much higher than 150*l.* What is the sum for a man, frequently with a large family, who is obliged to maintain a dignified position in society, and to keep a sort of open house, (particularly in the country,) or to be considered a mean and shabby fellow, to the disgrace of the Profession to which he belongs? And especially, what is this 150*l.* per annum, as things are now managed, when surveyors and commissioners are so niggardly, aye, unjust, in their allowances for actual disbursements? What is 50*l.* a year (the sum allowed me) for the keep of two horses, and a man to look after them, which are kept entirely for business purposes? And, more especially still, what is this 150*l.* per annum, when, to make it up, you are actually obliged to account for sums which you have not received, and many of which, in all probability, you never will receive? Three things, therefore, I conceive, we ought to agitate for, viz.:—

1. That the minimum amount of income upon which tax is paid should be much higher.

2. That that income should be *bonâ fide* receipts, and not, in part, doubtful book debts. This would be strictly just; for, if the actual receipts were given every year, the *real* income would be ascertained.

3. That a certain per centage should be fixed upon for expenses, according to the nature of the practice, (and all practices might be reduced into three or four classes for this purpose,) to be deducted from the gross amount of receipts. This would prevent commissioners and surveyors from venting their revenge, as is now, it is to be feared, too often the case, upon parties whom they considered their opponents on account of holding different political and religious views.

The above remarks are mere hints, intended to call the attention of abler heads to the subject. Of course it will be understood, that professional income alone is alluded to in these observations.

Bangor. I am, &c. Thomas Charles.

EFFECTS OF INDIAN HEMP.

[To the Editor of the Medical Times and Gazette.]

Sir,—The following is an account of the effects of the Indian hemp. I had often taken from twenty to thirty drops of the etherial

tincture. Within half a minute a slight excitement ensued, lasting for a few seconds (query, from the ether). Generally in a quarter of an hour a feeling something allied to the early stage of intoxication came on; everything was for the moment forgotten, usually a hearty laugh followed, the whole occupying a minute. No effect would then be felt for from three to five minutes, when the same symptoms recurred. Two doses were preferred; there was a longing for the second, if the first had not as full an effect as usual. The recurring periods of excitement were exceedingly pleasant—a calm forgetfulness; ideas passed with great rapidity, but were instantly forgotten; the mind had no power of recalling them. From nearly a drachm of the tincture, on one occasion, I experienced for three hours a sense of oppression in the præcordial region, with somewhat restless sleep. The appetite was always good the following morning.

On one occasion I took three grains of the extract (Ferris and Score's, of Bristol). No symptoms until half an hour had elapsed, when feelings as above came on. In one hour a dull forgetfulness, immense rapidity of thoughts, all instantly forgotten; cheerfulness and depression constantly succeeding each other. I felt myself getting more and more bound. I intensely tried to throw off the load, to command my thoughts, but could not. This state continued more or less for one hour. There was no inclination to move. A sudden but slight giddiness came on,—a desire to drink something cold. I took a glass of cold water. I was suddenly impelled to run around the room on my hands and knees, and in the same way got to the front door, having an instinct for cold. This fit lasted two minutes, when I recovered perfect consciousness for about the same period, and again was impelled to the same actions. I was less lost in the succeeding fits than the first; the lucid intervals were also less distinct. I roamed half an hour on my hands and knees in the open air. I was all this time conscious of what I did, but had not the desire to do otherwise; my actions were instinctive. After this, for ten minutes, I recovered, re-entered the house, explained the cause, and went off in hysterical laughing and crying for a few minutes. For one hour after this, I suffered great susceptibility of mind, was distressed beyond measure at any suggestions my friends made as to coming into the house, etc. etc. etc. This sensitiveness was the most striking of the phenomena. I most earnestly implored, in the softest whisper, that no request or suggestion should be made. Loud speaking was too great an effort. The rapid thoughts, in most confused order of succession, so instantly forgotten, were very painful. I made the strongest efforts to fix the attention to some train of thoughts in the mind, or in conversation with another, but without avail. This state lasted one hour. Two scruples of sulphate of zinc, with irritation of the fauces, induced vomiting. I enjoyed a good night, and had good appetite at breakfast next day. This account may be valuable as a simple narration of facts. I am, &c. M.D.

Plymouth.

CAUSTIC TO THE GLOTTIS.

[To the Editor of the Medical Times and Gazette.]

Sir,—Do me the favour to insert the following notice of a case which occurred in my practice a few years since, as it bears on some of the points mooted at the meeting of the Medical Society of London, reported in your Number for Feb. 21.

In January, 1844, a young physician came unexpectedly under my care, a few days before his death, from laryngeal and pulmonary phthisis. I found him almost exhausted by the inanition and suffering which resulted from ineffectual attempts at deglutition. No solid food could be swallowed, and all liquids appeared to return through the nostrils with great force. I proposed the application of a solution of nitrate of silver (℈j ad ℥j) to the glottis, by means of a sponge. This was immediately assented to by the patient, and done by me, with the effect of enabling him, in the course of a few minutes afterwards, to drink off a tumbler of bottled porter. The caustic was used once daily during the remainder of his life, and no further impediment to the swallowing of other fluids or solids occurred. To the best of my recollection no relief of cough or aphonia was noticed.—I am, &c.

Teignmouth, Devon. G. E. Forman.

CAMBRIDGE MEDICAL FELLOWSHIPS.

[To the Editor of the Medical Times and Gazette.]

Sir,—I wish to call your attention to a circumstance that has lately taken place connected with the Medical Profession at Cains College, Cambridge. There are, as you are possibly aware, in this College sundry fellowships appropriated to medical men; of these fellowships one or two are further set apart for medical men natives of Norfolk. A short time since, one of these Norfolk medical fellowships became vacant; and, at the meeting of senior fellows to fill up this vacancy, a Norfolk gentleman, already a junior fellow of some years' standing, was duly elected. All right and proper, you will say; and exactly what we should have done ourselves had we had a voice in the election. True; as far as the man and the scholar were concerned: but would you have elected a barrister to fill a medical fellowship? This gentleman, graduated as far back as 1838, and was called to the bar in 1848, having passed much of the intermediate time as classical lecturer in his College. No other candidate, I believe, was in the field who had taken as good a degree as the successful one; but surely there must have been others, Norfolk men, who had made a study of medicine, and as such, though perhaps lacking the scholarship, better qualified to fill a medical fellowship than a barrister. Is it likely or probable that our barrister will, having taken his degree twelve years ago, submit to all the drudgery of the earlier stages of his new profession? Will he attend hospitals, dissecting-rooms, and clinical lectures? Will he be fit to give medical lectures in the University, if called on so to do? Will he even be able to pass his examination for M.D. degree? Sir, it seems to me but reasonable, that the senior fellows, if bent upon giving this gentleman the Norfolk medical fellowship, should at least have given him a year or two to fit himself for his new vocation. Should the statutes not allow such delay, then elect the best ready Norfolk medical man, and pass by our barrister till he has learned his new trade, and there is another fellowship vacant. For my own part, I would sooner trust the youngest medical student, if I wanted a doctor, than even our new Lord Chancellor. I must apologise for the length to which I have gone, but knowing your desire to be kept informed of whatever concerns the Profession, I thought you would like to receive an account of the above transaction in one of the favourite Colleges of a favourite University.

I am, &c.

London. A Caius Man, but not a Disappointed Candidate.

P.S. The evils I complain of may possibly be all owing to defective statutes; if so, the sooner they are repealed or amended the better.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. Hodgson, Esq., F.R.S., President, in the Chair.

The Anniversary Meeting, held on Monday, the 1st of March, was numerously attended. An alteration was made in the by-laws, by which in future there will be but two ballots a-year, and previous to these each fellow will receive a Circular, stating the names and qualifications of the candidates for election, and the names of the parties recommending them. The finances were stated to be prosperous, and the general state of the Society to be highly satisfactory. The following gentlemen were elected as office-bearers for the ensuing year:—

President: Joseph Hodgson, F.R.S.—Vice Presidents: James Alderson, M.D., F.R.S.; T. Mayo, M.D., F.R.S.; W. Coulson; A. Shaw.—Treasurers: R. Nairne, M.D.; R. Quain, F.R.S.—Secretaries: W. R. Basham, M.D.; Campbell de Morgan.—Librarians: H. Pitman, M.D.; J. Dixon.—Members of Council: T. G. Balfour, M.D.; Sir J. Eyre, M.D.; J. Forbes, M.D., F.R.S.; S. W. J. Merriman, M.D.; T. Watson, M.D.; Wm. Bowman, F.R.S.; J. G. French; A. M. Macwhinnie; Edward Stanley, F.R.S.; Thomas Tatum.

The President delivered the following address:—

Gentlemen,—Our Society was established for the extension of knowledge; first, by obtaining and publishing essays and communications on the various branches of medicine and surgery; secondly, by publicly discussing those communications with the view to elicit additional information on the subjects to which they relate; and, thirdly, for the purpose of diffusing knowledge, by the formation and use of an extensive library of works on medicine and surgery and the collateral sciences. The report which has this day been made to you by your Council will, I trust, convince you that these objects have been successfully promoted during the past year. The financial condition of our Society was

never more prosperous,—a considerable addition of books has been made to our library, which now contains upwards of 25,000 volumes, and the thirty-fourth volume of our "Transactions," which was published at the commencement of the present session, is, from the importance and originality of the papers which it contains, worthy of its place by its predecessors. Probably also, it will be regarded as evidence of the thriving state of our Society, that, during the last year, the number of new Fellows who have sought and obtained admission upon our list exceeds that of several preceding years. But death has, during that time, removed from among us an unusual number of our associates, and it is my duty on this occasion to follow the example of my predecessors, by bringing to your notice the deeds and characters of those who are no more. Such a retrospect, while it may tend to excite activity and usefulness in ourselves, is due from the Society to our departed friends, as a memorial and affectionate recognition of their merits.

Richard Phillips, an honorary member of our Society, died, after a few days' illness, at his residence at Camberwell, on the 11th of May in the last year. He was 72 years of age, and had survived most of his scientific contemporaries. The friend and associate of Davy, Wollaston, Babington, Dalton, and of others who were devoted to chemical pursuits during the most brilliant era of British chemistry, Mr. Phillips also, during various continental travels, had formed the acquaintance of the most celebrated foreign chemists, who, when they visited England, availed themselves of the generous reception which he so liberally afforded them. In this country his reputation for the excellence and correctness of his opinions on chemical subjects was regarded as second to none of his contemporaries; and as an analyst, the venerable Professor of Chemistry in the University of Glasgow, Dr. Thomas Thompson, in his "History of Chemistry," has placed him at the head of British chemists. Sprung from a family long connected with the Society of Friends, the father of our deceased member was a printer in Lombard-street, in which business he was succeeded by his eldest son, William Phillips, whose authority as a mineralogist was universally acknowledged, at a time when mineralogy was far more in favour than in the present day, and whose treatise on that science, enlarged to the extent of present knowledge, is still regarded as the standard work on that subject. Nor can the claims of William Phillips for diffusing by his works a taste for the then infant science of geology be overlooked by those who recollect the efforts of the earlier labourers in this vast domain of knowledge. Placed in youth by his father with his friend and neighbour, William Allen, of Plough-court, a man whose fame as the fellow-worker with Clarkson and Wilberforce is even more widely spread than his well-earned reputation as a chemist, Mr. Richard Phillips, on quitting this well-known pharmaceutical establishment, started as a chemist and druggist in the Poultry, and subsequently devoted himself exclusively to the cultivation of his favourite science, adopting pharmaceutical and analytical chemistry as his especial pursuits, and during that period of his life his house became the habitual resort of the rising scientific men of the day. In 1805, he published a Memoir on the Bath Waters, which attracted much attention, and this was followed by a detailed examination of several other celebrated mineral springs. From this period until his death, the several scientific publications contain frequent and valuable papers contributed by him on the composition of many rare minerals, disquisitions on points of chemical philosophy, and critiques on various chemical and pharmaceutical works. Among these, perhaps, the most important in its results was, an experimental examination of the Pharmacopœia Londinensis of 1809, with remarks on Dr. Powell's translation, originally published in the *London Medical Review*, and afterwards reprinted in a regular form, in 1811, and followed, in 1816, by some further remarks on the Editio Altera of the Pharmacopœia of 1809. These publications stamped the subject of this notice as the first authority in the kingdom in pharmaceutical matters, and led the way to the much-needed reforms which have since been effected in this branch of medical science; and although at that time the keenness of his sarcasm and the severity of his criticism excited against him a somewhat antagonistic feeling on the part of a section of Fellows of the Royal College of Physicians, yet the critic lived to be the man especially consulted by the College on the compilation of the two last Pharmacopœias which have issued from that ancient, illustrious, and learned body. From the year 1821, Mr. Phillips conducted the *Annals of Philosophy*, and when that serial was incorporated with the *London, Edinburgh, and Dublin Philosophical Magazine*, his services were secured as one of the editors of that Journal, which post he held till his death. He was successively lecturer on chemistry at the London Hospital, at the Government Military College at Sandhurst, at Mr. Grainger's School of Medicine in Southwark, and at St. Thomas's Hospital. He also delivered several courses of lectures on chemistry at the London Institution, and lectured occasionally at the Royal Institution and elsewhere. In 1839, Mr. Phillips was appointed Curator of the Museum of Practical Geology, now in Jermyn-street, an office he held till his decease, which took place on the day previous to the opening of that Institution by H. R. H. Prince Albert. In 1822, he was elected a Fellow of the Royal Society, and was on the Council of that Society for several years. He was one of the founders of the Geological Society, and, for the two last years, held the office of President of the Chemical Society of London. In 1824, Mr. Phillips published his first Translation of the Pharmacopœia Londinensis, and was subsequently consulted by the College of Physicians respecting the Pharmacopœia of 1836. Of this latter work he also published a translation, enriched with valuable and copious notes, which ran through several editions. For the last few years he had again been engaged, in conjunction with a Committee of the above-named learned body, in experimenting upon the chemical preparations contained in the London Pharmacopœia recently issued, on a translation of which work he was employed a few evenings before his death. Valued and respected by all who enjoyed the happiness of knowing him, for the accuracy and extent of his knowledge, the frankness and simplicity of his character, which combined with ready wit, quickness of observation, a keen sense of the ludicrous, a fund of anecdote, great humour, and power of repartee, he possessed a large circle of friends; and, having earned for himself a lasting reputation for his scientific attainments, his extreme accuracy of observation, and his soundness of judgment as a chemical philosopher, Mr. Phillips closed an active and useful life, while yet both mental and bodily powers were undecayed. In the lecture-room he had few equals. Clear, terse, and convincing in his style, and remarkably adroit and successful in his experiments, his lectures were peculiarly impressive and instructing. During a residence of some years at Birmingham, where he was engaged in a large chemical undertaking, he took an active part in promoting the objects of the Philosophical Institution in that town. In the theatre of that Institution he delivered a course of lectures on the Philosophical Researches of Dr. Priestley, which excited general interest and admiration. In these lectures he traced, in elegant language and convincing style, the history of chemistry during the bright era when the researches of that enlightened philosopher, Dr. Priestley, with those of Black, Fourcroy, Lavoisier, Watt, Cavendish, and others, may be regarded as having first rendered it a rational science.

Dr. John Baron was elected a Fellow of this Society in the year 1815. He was born at St. Andrews in 1786, and was the son of a clergyman of the Scottish Church, who was Professor of Rhetoric and Literature in the University of that city. Dr. Baron received a portion of his early education in the College at St. Andrews, and was distinguished for his quickness and industry. At the age of 15 he was removed to the University of Edinburgh, where he soon procured the favourable notice of his instructors. His fellow students also highly appreciated him, and he was elected by them as one of the Presidents of the Royal Medical and Physical Society. In 1803, Professor Baron died, upon which his son, our late Fellow, prepared for the press his father's lectures, which were published in 1805, when their editor was only 19 years of age. In the same year he also passed his examination and received his degree. He then attended a patient to Lisbon for two years, and soon after his return settled at Gloucester, where, almost immediately, he was appointed one of the Physicians of the Infirmary, and attained at once considerable practice. Dr. Baron toiled hard at his public duties, and omitted no opportunity of increasing his knowledge of morbid structures and his familiarity with the diagnosis of disease, in both of which departments of medical science he particularly excelled. One of the most prominent portions of Dr. Baron's life was his friendship and connexion with Dr. Jenner. On his first residing at Gloucester he became intimate with this great man, and sedulously worked with him for the general introduction of vaccination. This intimacy lasted till the death of Jenner, when his trustees called upon Dr. Baron to write a history of the discovery, and a life of its author. This work was executed with great success; and in his life of Jenner, Dr. Baron has recorded with extreme fidelity the history of that discovery, which is the greatest boon that science has conferred upon the human race. Dr. Baron was also in constant intercourse with Dr. Baillie, whom he attended during his last illness at his residence in Gloucestershire. He was always alive to any plan which had for its object the mitigation of sorrow and pain. He had much influence in respect to the establishment and management of the Gloucester Lunatic Asylum, long an example of humanity of treatment and excellent arrangement when less attention was paid to those afflicted with the greatest of ills than has latterly been shown. He was likewise one of the chief originators of the Bene-

volent Fund, in connexion with the Provincial Medical and Surgical Association. Dr. Baron's constitution was never strong, and, in 1832, being much shaken by continued exertion and an attack of Asiatic cholera, and feeling no longer equal to the fatigues of distant practice, he removed to Cheltenham, where he resided until his death, which occurred within the last year. The immediate cause of his death was an attack of bronchitis, but he had long suffered from a gradual loss of nervous and muscular power, which, although it deprived him in a great measure of the use of his limbs, rendered him unable to keep his head erect, and caused his voice to be but little able to do its part, with many other effects of what is commonly called "creeping paralysis," left his mind to the last in the most entire state of quick and sagacious perception. One of the chief characteristics of Dr. Baron was his earnest and undeviating piety. The successes and engrossing employments of his career never interrupted his religious duties, which afforded him perfect consolation on the bed of death. The sincerity and earnestness of his religious feelings caused him to be a warm approver and supporter of the Medical Missionary Society, founded in Edinburgh some years ago. Dr. Baron was elected a Fellow of the Royal Society in 1823, and was an honorary member of the Medical and Physical Society of Calcutta. In 1817, he contributed a paper to the Transactions of our Society, entitled, "The History of a Case of Rupture of the Brain and its Membranes, arising from the Accumulation of Fluid, in a Case of Hydrocephalus Internus." In 1819 he published his "Inquiry, illustrating the Nature of Tubercular Accretions of Serous Membranes, and the Origin of Tubercles and Tumours in different Textures of the Body." In 1822, his second Treatise was published, entitled, "Illustrations of the Inquiry respecting Tuberculous Diseases." At page 4 of this second work, Dr. Baron states, in the form of propositions, nine in number, his ideas respecting the disease in question. Of these, the second, which affirms that "tubercles in their commencement are small vesicular bodies (hydatids), with fluid contents," contains the essence of his theory. In both treatises he quotes passages from some of the older writers, especially Morgagni, with the view of showing that their views on this subject were not altogether different from those which he advocated, although not so distinctly expressed. In the second treatise he combats the view of modern and contemporary authors,—of Bayle, Laennec, and Broussais, in France, and of Abercrombie in this country; and endeavours to prove, by showing the errors of their several theories, the truth of his own. With whom the theory, that tubercles are formed from hydatids, originated, appears doubtful. In a letter from Dr. Jenner, dated December, 1809, published by Dr. Baron in his "Life of Jenner," there is the following expression: —"I trust that some advantage may, one day or another, be derived from my having demonstrably made out, that what is tubercle in the lungs has been hydatid." Indeed, in the writings of Sir Everard Home and Dr. Adams, both, as well as Dr. Jenner, disciples of Hunter, the theory of the origin of certain morbid growths in serous cysts or, as such were regarded, hydatids, is stated and advocated. In the present day, when the pathology of tubercular disease and of other morbid formations has been rendered far more evident by improved microscopical investigations, this theory has given place to other views, which even yet require much research to accomplish the full development of this important subject.

Mr. Durancé George died at the early age of 36, in November last. He had been a student at University College, where he was regarded as possessing great talents, and likely to obtain a high station in his profession. He was House-surgeon to Mr. Liston, at University College Hospital, and was on terms of close intimacy with him until the time of his decease. Mr. George was distinguished by great facility and readiness of expression, as well as by an unusual extent of information on a variety of subjects. It was his original intention to have followed the profession of surgery, but the allurements to early fortune which were held out to him by the prospect of succeeding his uncle, Mr. Cartwright, the eminent dentist, induced him to forego that intention, and to abandon the toils and uncertainties which attend the endeavour to attain surgical distinction. It was known to his friends, however, that Mr. George parted from the cultivation of the higher branches of his profession with regret, and that in doing so he resolved on elevating the rank of that which he adopted. With this intention he made himself thoroughly master of its details. He lost no opportunity of investigating the structures upon which he was occupied, both in their healthy and morbid conditions, and he hoped to illustrate his inquiries by reference to the condition of other structures in health and in disease. Mr. George in this way had collected a large store of facts and illustrations to form a work on dental surgery,—a work which would have shown that talent well applied can at all times find materials from which it may elicit interesting and useful results. Cut off by a brief illness in the prime of life, these intentions have been frustrated, and Mr. George will be remembered by what he was about to do, rather than by what he has done. A short Memoir on the excito-motory functions is the only published writing of Mr. George with which I am acquainted.

It is with feelings of sincere sympathy that you will regard the loss of another of our associates, which took place on the 22nd of September last, under circumstances peculiarly afflicting. Dr. John Carr Badeley was an eminent physician at Chelmsford, where he possessed an extensive range of practice, and was universally esteemed. On the evening before his death, Dr. Badeley suffered from a severe attack of toothache. Early in the following morning he went down into his study for the purpose of taking some medicine to alleviate the pain, and he inadvertently partook of some morphia; his untimely decease was the result, to the inexpressible distress of a family of ten children, and a numerous circle of attached friends. Dr Badeley was well known to his professional brethren as an accomplished and talented physician, and was the author of several works connected with medicine. He delivered the Harveian Oration at the College of Physicians in 1850, which lecture was much commended. He also recently published some lectures on the mind. He was a man of sparkling wit, of great amiability of disposition, and combined much zeal in the pursuit, with an extensive knowledge, of our Profession.

I have next to notice the decease of Dr. Charles Julius Roberts, who was born in Farringdon-street, and educated at St. Paul's School. He first studied medicine in London at St. George's Hospital, and then went to the West Indies, where he remained for three years. On his return he studied at Edinburgh, and was a favourite pupil of Dr. Home. He took his degree in 1820, and was admitted a member of the College of Physicians and of this Society in the following year. Dr. Roberts was the author of a small work on the Domestic Management of Children, and of various papers in the periodicals. He had a great taste for collecting and studying the old medical writers of this country. He was kind-hearted and of highly honourable feelings. He died rather suddenly at New Kingston, where he was on a visit for a few days; it was believed of a spasmodic affection of the heart. He had formerly been physician to the Aldersgate-street Dispensary, and was physician to the Welch charity, and to the Deaf and Dumb Institution.

The next member of our Society whose death we have to record was removed from his course of active usefulness at a period of life when professional talent is generally reaping the reward of its meritorious exertions. Dr. Algernon Frampton was the second son of Dr. Algernon Frampton, who died about nine years ago. He was born in 1803, and was, therefore, in his 49th year. Having received his classical education at Harrow, under the Rev. George Butler (now Dean of Peterborough), he entered at St. John's College, Cambridge, in 1821, and four years afterwards took his degree of B.A., and obtained the twelfth place among the wranglers. In 1825 he commenced his medical studies at the London Hospital, of which establishment his father was one of the physicians; and, having taken his degree of M.B. in 1832, he was admitted a licentiate of the College of Physicians, and in 1835, a year after he had obtained the degree of M.D., was made a Fellow. He delivered one of the annual courses of lectures before the College, and subsequently served the office of Censor for two years. He was for seven years physician to the London Dispensary, and for nineteen years was connected with the London Hospital as one of its medical officers, —first as assistant-physician, afterwards as physician. During a portion of this period he lectured on toxicology in the medical school of that Institution. He died, after many months of suffering, of disease of the heart, complicated with purpura and enlarged spleen. Dr. Frampton was a man of considerable intellectual power, rendered somewhat less conspicuous by his remarkable diffidence, which, however, was combined with great independence of mind. He was strictly honourable in all his dealings. Both in his conversation and writing he was remarkable for a fund of playful humour, which never degenerated into offensive wit, though it contained a delicate kind of satire. He was totally devoid of selfishness, ever thoughtful and considerate for others, and was remarkable for his kindness and benevolence. These qualities commanded the respect of all who knew him. He published three papers in the *Medical Gazette*. One, "On a New Test for Corrosive Sublimate" (June 9, 1843); a second consisting of further observations on the same subject (October 13, 1843); and the third, "On a very Ready and Easy Manner of Estimating the quantity of Solid Matter held in Solution in any given quantity of Urine of a given Specific Gravity (at 60° Fahr.)" He had

previously published a small pamphlet, entitled "An Account of the Mutual Assurance Society." In 1847 he published, in the *Pharmaceutical Journal*, a "Report of Experiments made to ascertain the Action of a Poisonous Leguminous Plant from Swan River, New South Wales." For the last three years he had been engaged in editing a new edition of "Thomas's Practice of Physic."

Though the career of a medical practitioner rarely affords any biographical incidents sufficiently striking to arrest general attention, the lives of such men not unfrequently present examples of active benevolence and untiring energy in the discharge of self-imposed duties, which furnish profitable matter for contemplation. This is especially true of the member of our Society whose death I have now to notice, the whole tenor of whose life and character evinced his possession of these qualities in an especial degree. James Russell was the son of a merchant, whose family, being members of the Unitarian body of Dissenters, were greatly attached to, and connected with, Dr. Priestly. Upon the conclusion of his scholastic education, Mr. Russell became the pupil of the late Mr. Blount, the eminent surgeon of Birmingham, from whom he imbibed a decided taste for general scientific pursuits in addition to the ground-work of a sound medical education. Having completed his professional education at Guy's Hospital, he became connected with the Dispensary in Birmingham, first as resident surgeon, and afterwards as one of the surgeons of that Institution, the duties of which offices he discharged with great ability and humanity. For many years he held the office of surgeon to the town infirmary, the opportunities afforded by which enabled him to mature the extensive practical knowledge of his profession which he had previously acquired. After the lapse of a number of years, the increase of his private professional engagements obliged him to relinquish this office, the duties of which had led his philanthropic mind to take a cordial interest in the condition of the poorer inhabitants of the town in which he resided. In this subject, indeed, he ever afterwards felt the deepest solicitude, and made the sanitary condition of the public a matter of his anxious and constant regard. He was one of the sanitary inspectors of Birmingham, and for several years discharged the important duties of that office with exemplary zeal and efficiency, with no other reward than the gratifying knowledge of his own usefulness. On various occasions relating to the public health, Mr. Russell's talents and experience were had recourse to in investigations instituted by the Poor-law Board, and by commissions appointed by Government, the results of which have come before the public in a variety of ways. He rightly considered the investigation of those conditions upon which the public health depends as a peculiar province of medical science and practice, and he constantly exerted his best energies to investigate the condition of those external agencies which may be regarded as the aggravating, if not the specific causes, of contagious and endemic disease. It was his opinion, that, although medical science had hitherto justly devoted a vast extent of observation to the investigation of the nature and treatment of disease, it had not until lately regarded with deserving care preventive treatment, and those sanitary measures upon which the health and well-being of society so essentially depend. His labours on these points were of extreme general utility and importance, especially in relation to ventilation and drainage, and the construction of dwellings. Though he cultivated with unswerving industry every department of medical science, there was one to which Mr. Russell devoted special attention, namely, that of the accoucheur, and few men have possessed a larger amount of experience, or displayed more talent in the discharge of the duties connected with it. He accumulated much valuable and interesting matter, chiefly of a statistical character, in connexion with this important department of medical science, and it is to be regretted, that the pressure of his other avocations, and his desire to render it as perfect as possible, should have prevented its publication. He has left accurate notes, written by his own hand, of upwards of 2700 cases of midwifery, which he had personally attended. He was surgeon to several public charities and institutions, and took an active part in the establishment and proceedings of the Medical Benevolent Institution, which has for upwards of twenty-five years existed in Birmingham. Notwithstanding the demands of a very extensive private practice, Mr. Russell devoted much of his time and attention to numerous public benevolent institutions, both by the contribution of professional services, and by attention to their general management. Untiring industry, with much method in the dispensation of his time, was one of his prominent characteristics; but it was a striking and habitual peculiarity of his manner, that he never allowed those who were desirous of obtaining his counsel or sympathy to feel that he was in haste, but he would listen, with the most enduring attention, to their statements, however extended, and converse with his patients or their friends on the subject which occupied their minds as though his own were engaged by no other of equal interest, at the very time that he was almost overwhelmed by the number and urgency of his various engagements, or was himself in need of the support which he so generously administered to others. But Mr. Russell's exertions were not limited to merely professional and benevolent objects. So strong was his attachment to science generally, that he contrived to devote much of his time, notwithstanding his numerous avocations, to its promotion. At one period he gave instructions to artists in anatomy, delivering lectures to them, and exhibiting to them anatomical demonstrations. He was throughout his life most active in promoting the interests of the Philosophical Institution in Birmingham, and for many years occupied by annual election the arduous post of Treasurer to that Society. On two occasions also, when the British Association for the Advancement of Science visited his native town, the worthy reception of its members was chiefly provided for by his untiring energy. If there were any features in the character of Mr. Russell more remarkable than his unbounded industry, they were his uniform consistency of conduct, the cautious liberality of his opinions, and his firm abiding friendships. Notwithstanding his staunch attachment to the faith in which he was brought up, which no circumstance in his life in any degree ever induced him to deviate from, he cherished so unfeigned a regard for liberty of opinion in others, that he established his warmest and most lasting friendships with men of widely differing religious persuasions. Toleration of opinion was one of the leading characteristics of his mind. His friendships were of the most sincere and lasting description, and his appreciation of justice and merit was such that he was ever anxious to obtain, and did in many instances obtain, for them that public recognition to which he conceived them to be entitled. Mr. Russell died on the 24th of last December, in the 66th year of his age. His death was caused by that dreadful malady, angina pectoris, from the symptoms of which he had suffered during the preceding six years.—Pardon me, gentlemen, if I have wearied you by so long a detail of the merits of this estimable man. For upwards of forty years an unclouded and most intimate friendship existed between James Russell and myself. The companion of my youth and the associate of my riper years, I well knew his enlightened benevolence, his disinterested generosity of spirit, and his untiring usefulness. His was not the ambition which aims at brilliant achievements or lofty distinctions; as he has often said to me, he was content to be amongst "the hewers of wood and the drawers of water;" but the contemplation of the incidents of such a life,—and for the honour of our Profession, may I add, that I believe thousands such exist in it,—shows how incomparably more powerful for wide-spread and lasting good is the sincere and faithful devotion of an upright, generous, and indefatigable mind to the cause of human happiness and improvement than the exercise of even distinguished talents apart from the guidance and control of such qualifications.

Forgive me also if I occupy a few moments more of your time in noticing another of my most intimate and dearest friends, who, although at the time of his death he had ceased to be a Fellow of our Society, was one of its most active and zealous promoters at its foundation, and contributed an interesting communication to the first volume of our "Transactions." George William Young, was the son of a surgeon in the City, in which part of the Metropolis the son also practised our profession with great success during many years. Mr. George Young was Surgeon to the Aldersgate Dispensary, but never held any other public appointment. In early life he had passed some years upon the Continent, and was well acquainted with several foreign languages and the writings of Continental Professors. Mr. Young was remarkable for the extent and minute accuracy and precision of his professional knowledge, which was not exceeded by that of any man whom I have ever known, and which extended into every department of medical science. The kindness, urbanity, and refinement of his manners, which rendered him to all a most acceptable companion, were only equalled by the uprightness, generosity, and goodness of his heart. Delicate health compelled him, at a comparatively early period of life, to relinquish the practice of our Profession, but, until his death, which took place in August, 1850, in the 76th year of his age, he continued to cherish an active interest in everything connected with its proceedings.

Gentlemen, I thank you for the patient indulgence with which you have listened to me; but, before I conclude, I wish to call your attention, for a few moments, to some points which appear to be of great interest to the welfare of our Society. The interchange of opinion, and the communication of the results of individual observation and experience, which are the proper business of our discussions, are certainly amongst the most important, and are probably the most important, objects of

this Society. It is thus that error may be corrected and truth elicited. The sphere of individual observation may be considered to be enlarged by bringing forth in this way the experience of many inquirers, which serves, like light shining from various sources, to illuminate the object of research. But, for this end, gentlemen, our discussion should be conducted in the calm spirit of true philosophy, apart from all personal and acrimonious considerations. Truth should be the sole object of our discussions, and all vain display of opportunities, or rivalrous exhibition of feelings in favour of peculiar opinions or practices, should find no place in our meetings. I wish also to observe, that the duration of our meetings is short, and the number of attending members, capable of taking useful part in our discussions, is large. Hence the importance, in order that we may obtain the full benefit of numerous opinions on the subject before us, that each speaker should only occupy sufficient time for the just exposition of his views and experience; and I hope I may be permitted to add, that it should on all occasions be borne in mind that our hall is not a lecture-room. In drawing the attention of this meeting to these points, my object is to relieve our most important Society from the recurrence of occasions of much anxiety to many of its oldest and most enlightened members. The Report of your Council has rendered you acquainted with an important alteration which, after much and anxious consideration, they recommend in the by-laws of the Society with regard to the election of members. Not only does the present mode of conducting this important business interfere much with the proceedings of our meetings, but it is also considered that sufficient opportunity is scarcely afforded to the Fellows to investigate the qualifications of candidates for election. The proposed alteration, it is believed, will obviate these evils, and cannot fail to add both to the convenience and character of the Society.

CHEMICAL SOCIETY.

Professor Daubeny, President, in the Chair.

The President read a paper on

THE VARIATION IN THE RELATIVE PROPORTION OF POTASH AND SODA

PRESENT IN CERTAIN SAMPLES OF BARLEY GROWN IN PLOTS OF GROUND ARTIFICIALLY IMPREGNATED WITH ONE OR OTHER OF THESE ALKALIES.

The author details some experiments, undertaken by him at the Oxford Botanic Garden, with the view of determining whether the usual quantity of potash and soda existing in barley might be made to vary by causing the plant to grow in soil impregnated with more than the ordinary quantity of one or the other of these alkalies. He found, that, when the barley had grown in a soil which had been dressed with a strong solution either of carbonate of soda or of chloride of sodium, the ashes of the plant contained about 8 per cent. more soda than was present when the plant had grown in a soil impregnated with carbonate of potash, or left unimpregnated. This difference may admit of explanation by supposing one alkali capable of replacing the other within the organism of the plant; but the author thinks it more probable that it arose from the sap circulating through the plant at the time when it was cut containing in the one case more soda than it did in the other. The saline contents of the fluid of the sap would of course be confounded with those which had been actually assimilated by the plant, and hence, from the variation in its composition, must tend to modify the amount of the alkalies obtained from the ashes of the plant in each instance according to the nature of the material with which the soil had been impregnated.

ON THE COMPOUNDS OF COTTON WITH THE ALKALIES.

By J. H. GLADSTONE, Ph. D.

The author first described the process of Mr. Mercer, by which the beautiful fabrics, made known to the public through the Great Exhibition, are produced. When cotton, or an article made of that material, is immersed in strong caustic soda in the cold, a certain combination is effected, which is again destroyed by pure water; but the "Mercerised" cotton thus produced is permanently contracted, and rendered more susceptible of dyes. This was illustrated by a number of specimens, much shrunk, so that they assumed an appearance of extraordinary fineness, others puckered in patterns by partial Mercerization, and others again printed with colours which surpassed in depth and brilliancy the colours produced by the same means on the calico in its original state. Dr. Gladstone proceeded to detail experiments by which he had succeeded in obtaining the compound of cotton and soda free from adhering alkali, through the agency of strong, sometimes absolute, alcohol. He found that the proportion of soda which combined with the lignine varied with the strength of the solution employed, but under no circumstances exceeded one atom, the formula of the "sodaed" cotton being C_{24} H_{20} O_{20} NaO. There was a varying amount of combined water. Some properties of this compound were discussed, and the author then proceeded to state his conviction that there was no sufficient ground for viewing the "Mercerized" cotton as chemically different from the original lignine. It is identical in composition, and the change of properties may be accounted for by the change in its physical condition. When viewed under the microscope, the fibres in their ordinary condition appear as flattened twisted ribands; but the moment they are touched by the alkaline ley, they untwist themselves, contract in length, and swell out, assuming a rounded solid form; and this circular appearance they retain after the soda is removed by water. This not only explains the shrinking, but the cause of a larger quantity of dye being absorbed, as the substance of the fibre itself is porous. Potash has a similar action to that of soda, giving rise to a compound, the formula for which is C_{24} H_{20} O_{20} KO.

PARIS ACADEMY OF SCIENCES.

ON NEURALGIC AMAUROSIS.

By M. TAVIGNOT.

The author of this communication gives the name of neuralgic amaurosis to the complete or incomplete, partial or general, paralysis of the nervous retina under the influence of neuralgia of the fifth pair of nerves.

"The mode of action exercised on the eye by the fifth pair of nerves affected with neuralgia, is," states M. Tavignot, "subject to certain laws, which I will endeavour to describe. I admit two species of neuralgic amaurosis, very characteristically distinct from each other. The one is attributable to a neuralgic condition of the extra-orbital branches of the trifacial nerve,—this is the extra-orbital neuralgic amaurosis; the other arises from a neuralgic condition of the ciliary nerves,—this is the intra-orbital neuralgic amaurosis.

The extra-orbital neuralgia of the fifth pair appears to me to act on the retina, producing a paralysis of that membrane. This paralysis results from a want of equilibrium in the distribution of the nervous influence, as if the excessive waste of this fluid by the extra-orbital branches took place at the expense of the ciliary nerves, which would thus be more or less deprived of it.

Both one and the other form of neuralgic amaurosis appear to have an analogous origin, although differing completely in their symptoms. The cause of neuralgic amaurosis, considered in a general manner, is an abnormal state of the blood, resulting from an irregular assimilation, or a vicious re-assimilation.

Local treatment is not likely to be successful, unless combined with general treatment.

PHILOMATHIC SOCIETY OF PARIS.

ON GOITRE AND CRETINISM.

By M. GRANGE.

The author informed the Society, that he had continued his researches on goitre and cretinism during 1851, with especial reference to the nature of the soil and of the waters of the countries in which these maladies are endemic.

M. Grange recalled to the remembrance of the Society the conclusions to which he had been led by his previous researches, and which were laid before the Academy of Sciences. These conclusions were:—

1. That goitre and cretinism are independent of meteorological phenomena, and that sanitary conditions have but a very secondary influence on their development.

2. That goitre and cretinism are generally endemic in the localities of magnesian soils,—a fact which has been well established in the cases of the French and German Alps, Piedmont, and Switzerland.

3. That the surest means of preventing and of curing these affections, is to change the water used for diet, and, when this cannot be done, to use those kinds of salt in the food which are found to contain the largest proportion of iodine.

The researches of M. Grange in 1851 confirm these conclusions; he has visited several provinces of France, part of Italy, etc., and examined not only the mineralogical and geological character of

the various soils, but also ascertained the amount of iodide of potassium present in the water, the food, and the secretions.

He states, that, while it must be admitted that the quantity of iodide of potassium in the water and in the food increases with the distance of removal from mountainous districts, yet the distribution of the goitre bears no relation to this distribution of iodides, for it is precisely where theory and analysis indicate the presence of a minimum of iodine in the air, the water, and the food, that fewer cases of goitre are found. He has ascertained that the number of persons affected with goitre and cretinism generally diminishes in proportion to the rise from the plains to the heights, and points out the frequent practice of sending children to the higher parts of the district to be cured or preserved from goitre, instead of to the plains, where a larger proportion of iodine is present.

M. Grange proceeds to state, that it has generally been observed, that those waters which contain large proportions of lime and magnesia do not contain iodine, and this has been pointed out by M. Chatin. M. Grange believes that iodide of potassium plays a part in the preservation from these affections, but is of opinion, that we must not conclude that the absence of iodide is the cause of goitre, since in localities where it is not found in any appreciable quantity, or where theoretically and analytically it has been shown to be present in a minimum quantity, the population of those districts are not subject to goitre. The same observation also holds good with regard to the quantity of iodide which is present in food, for although the diet of the population of Berne, Aran, etc., is more highly iodurctted than that of the inhabitants of the Alpine summits, yet the goitre has made fearful ravages in those cities.

M. Grange announced that he was still engaged in researches on this subject, especially with the view of ascertaining the influence of the iodides which are taken with the food, and the quantity of iodine contained in the secretions.

ON THE ELIMINATION OF CERTAIN POISONS.

By M. A. F. ORFILA.

The author of this communication states, he has found that, when bichloride of mercury, acetate of lead, sulphate of copper, or nitrate of silver, has been administered to animals for some time, the mercury generally disappears from the system in eight or ten days, (on one occasion only was it found on the eighteenth day;) the lead and the copper make their re-appearance in the liver, in the coats of the intestines, and in the bones, eight months after they have been taken into the stomach. Silver, the presence of which in the liver can in some cases be demonstrated at the end of about six months, is not found again in any part of the system seven months after the administration of nitrate of silver.

In the course of these researches, M. Orfila observed, that the lead, copper, and mercury were carried off in the urine, but that, while the two former are taken up by the renal secretion to two days after the administration of the salt of copper or of lead employed, the mercury continues to be carried away by this excrementitious product as much as eight days after the administration of the mercurial preparation. M. Orfila has in no instance detected the presence of silver in the urine of animals who have taken nitrate of silver.

The author has also found that ethylamine and amylamine, whose physical and chemical properties are analogous to ammonia, produce the same results on the animal economy as that substance itself. In the case of some comparative experiments with dogs on the action of these alkalies and ammonia, the same symptoms of poisoning were presented, and the same lesions of the tissues; the analogy is in fact complete, whether the substance be introduced by the digestive tube, or the animals be made to respire in atmospheres charged with these substances.

NEW INVENTIONS AND PATENTS.

The following is the specification of a patent granted to M. de Fontainemoreau, for "certain improvements in preserving animal substances from decay, by means of a composition applicable to the cure of certain diseases":—

The invention consists of the employment of metallic salts, but principally of sulphate of zinc, in a state of aqueous solution, at a certain degree of strength, for the preservation of corpses or anatomical parts and animal substances in general, from decay, which said metallic solution, when combined with certain emollient substances, is applicable to the cure of certain diseases.

To obtain the above effect, says M. Fontainemoreau, I operate as follows:—

"The salts of zinc, as they are found in commerce, may be used, but I employ the metal itself, on account of its superior state of purity. I dissolve a portion of zinc, previously granulated, in a mixture of sulphuric acid and water, which I cause to combine and to form a solution of the strength of from 30° to 40° Beaumé, (sp. gr. 1246 to 1358.)

"I filter the solution and let it stand until clear, when I pour off the clear solution and employ it for injections, by introducing it through one of the arteries of the corpse. If the subject is intended to be exposed to the open air or in a naked state, I add to the solution, during the operation by injecting, about one-third of the weight of oil of turpentine, so that it may form a complete amalgamation. Any odoriferous essence may also be added, and I also add a red colour.

"If I have to preserve anatomical parts by immersion, then I employ my solution in a pure state, and concentrate it only to 20° or 23° Beaumé (sp. gr. 1151 to 1178). I prepare the solution in the same way as that before mentioned.

"When the said principle is applied to the cure of gangrenous diseases, I employ the liquid in the highest concentrated conditions, and weaken it with a decoction of linseed, marsh mallow, or other emollient plants, and I reduce it to the strength of 4° to 10° Beaumé (sp. gr. 1027 to 1070). I use it by imbibing lint or compress with it, which I apply on the wound, taking care to change it each time until a complete cure has been effected.

"When it is required to disinfect places rendered offensive by the presence of organic or animal matter in a state of fermentation, I dissolve the liquid in water, and reduce it to a strength of 10° Beaumé, (sp. gr. 1070.)

"Lastly, when it is desirable to employ it for washing the hands or other parts of the body, I reduce the solutions to the strength of 2° or 3° Beaumé, (sp. gr. 1013 to 1020.)

"I claim, first, the application of metallic salts, but principally the sulphate of zinc, at the degrees above laid down, or thereabouts, for the preservation of corpses or anatomical parts, and animal substances in general, from decay, as hereinbefore mentioned.

"Secondly, the application of the said solution, combined with emollient substances, for the cure of wounds, or other similar diseases of the human body, as hereinbefore mentioned."

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 5th inst.:—

Atkins, Aaron, Mile-end-road.
Beale, Bernard Charlæs, Bedford-square, Stepney.
Crisp, James Henry, Bath.
Goring, Charles, Demerara.
Kirkman, William Phillips, Woodbridge, Suffolk.
M'Cann, James, Parliament-street.
Paske, Charles Thomas, Hon. East India Company's Service.
Pilkington, William, Leyland, Lancashire.
Rhind, Samuel, Ross, Herefordshire.
Walmsley, Stephen, Liverpool.

The College Lectures.—The course of lectures by Professor Owen will be commenced on Tuesday next at four o'clock.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 4, 1852:—

Butcher, John Breay, Devonport.
Creswell, Thomas Hobbes.

Medical and Chirurgical Society.—The following gentlemen were elected as Fellows of the Society on March 9, 1852:—Alfred Baker, Esq., William Davis, M.D., John Roberts, M.D., Sherard Freeman Statham, Esq., Henry Thompson, Esq., John Wiblin, Esq.

Military Appointments.—2nd West India Regiment: Acting Assistant-Surgeon T. Llewellyn Nash, M.D., to be Assistant-Surgeon, vice Clarke, appointed to the staff. Hospital Staff: Assistant-Surgeon Patrick Joseph Clarke, from the 2nd West India Regiment, to be Assistant-Surgeon to the Forces, vice Moore, appointed to the 6th Dragoon Guards.

Naval Appointments. — Assistant-Surgeon John Bernard Ricards (1847), at present serving in the Rodney, 90, to be assistant-surgeon of the Pioneer, screw-steamer, in the Arctic Expedition. Surgeon James John Louis Donnet (1845) to be Surgeon-superintendent of the William Jardine convict-ship. Assistant-Surgeon Hart Gunlett, M.D. (1846), recently serving in the Southampton,

50, on the south-east coast of America station, to the St. George, 120, guard-ship of ordinary at Devonport. Assistant-Surgeon Stephen Bowden (1845) from the Britannia, 120, flag-ship on the Mediterranean station, to the Impregnable, flag-ship at Devonport. Acting Assistant-Surgeon David Wilson to the Polyphemus steam-sloop, for service on the coast of Africa.

Medical Appointments and Vacancies.—Dr. Cogswell has been appointed Physician to the St. Pancras Royal General Dispensary. A vacancy has occurred in the office of Physician to the Queen's Hospital, Birmingham, which will be filled up by the Council of Queen's College on the 4th of May. Candidates must be graduates of a British university, and the gentleman who is selected for the office will be required to deliver clinical lectures, and also to undertake any vacant professorship at the College not incompatible with the office of hospital physician. Testimonials to be sent in on or before the 30th of April. The Professors are pledged to recommend the best qualified candidate. The office of Assistant-surgeon and Apothecary on board the Dreadnought, seamen's hospital-ship, is vacant. Candidates must possess the double qualification, be between 25 and 40 years of age, and unmarried. Testimonials received up to the 25th inst. The guardians of the Abingdon Union require a medical officer for the sixth district of that union, comprising the parishes of Drayton, Stadhampton, Chislehampton, March Balden, Toot Baldon, and Nuneham Courtney, with a population of 1877, extending over 7880 acres. Salary 43*l.* a year, 10s. per case for midwifery within two miles of the surgeon's residence, and 12s. 6d. per case beyond that distance, 1s. 6d. per case of vaccination, and also the fees allowed by the Poor-law Board for accidents, etc. Application to be made on the 18th inst., at 10 a.m. Dr. Olliffe has been appointed Physician to the British Embassy in Paris.

University of Cambridge.—The examination for the Natural Sciences Tripos for 1852, began on the 8th instant, at 9 a.m., in the Senate-house. The order of the examination was, on the 8th, comparative anatomy and geology; on the 9th, physiology and botany; the 10th, chemistry and mineralogy; the 11th, mixed questions.

University of St. Andrews.—The next examination for the degree of M.D., at this University, will commence on the 5th of May. All persons holding British medical or surgical diplomas are eligible as candidates for the degree.

The University of France.—According to the new regulations made by the President of the French Republic, the present organization of this Institution, established by the Emperor Napoleon, is to be utterly destroyed.

King's College Hospital.—The first annual meeting of the governors of this hospital since the passing of the Act of Incorporation of the hospital with King's College was held a few days ago; Lord Radstock in the chair. Reports of the general state of the hospital and of the building and endowment funds were read. The funds had been heavily taxed during the past year, there having been an increase in the out-patients of no less than 5148, necessitating an appeal to the generous and wealthy for assistance. The Report on the building and endowment funds was satisfactory. Great progress had been made towards commencing the new building, by the removal of houses and other obstructions, so as to clear the ground for the laying the foundation-stone on the 16th June next, when the Earl of Ellesmere, the President of the hospital, will officiate. The adjoining burial-ground, long known as the infamous Green-ground, has been bought and taken possession of, and will be kept as an open space for the hospital. If meant as a promenade for the sick, it must undergo some process of purification to render it suitable for the purposes of the hospital. The locating an hospital so close to an over-crowded burying-ground was a mistake from the first. Some good, however, has been done,—the ground, as such, is closed; we trust for ever for interments.

The Hunterian Museum.—The Managing Committee of the Jardin des Plantes have just presented to the Council of the Royal College of Surgeons casts in plaster of two enormous eggs of the gigantic wingless bird of Madagascar, the Æpyornis maximus of of Isid. Geoffroy de St. Hiliare. Some idea of the size of the egg may be conjectured when the reader is informed, that one of them is equal to 12 ostrich, 16 cassiowary, 148 hen, or 50,000 humming-bird eggs.

Medical Society of London.—At the anniversary meeting of this Society on the 8th inst., after the delivery of the oration by Mr. Edwin Canton, the Fothergillian gold medal was presented to Mr. F. W. Headland for the best essay "On the Mode in which Therapeutic Agents introduced into the Stomach produce their Peculiar Effects on the Animal Economy," and the Society's silver medal was awarded to Mr. Headland, sen., for special services rendered to the Society in the management of its finances. The subject for the Forthergillian prize essay for 1853 has been already announced; that for 1854 is, "On the Diseases of the Fœtus in Utero, not including Malformations." The treasurer's report showed, that the Society consisted of 457 fellows,—that is; 69 honorary, 98 corresponding, and 290 subscribing fellows; 7 of the latter being life-members. During the past year, 10 new fellows were elected. The receipts during that time amounted to 462*l.* 18s. 5d., the expenditure to 380*l.* 16s. 11d.; leaving a balance of 82*l.* 1s. 6d. in favour of the Society. There are arrears due to the Society to the amount of 338*l.* 2s. 1d., of which 122*l.* 17s. are owing for the past session. The greater part of this sum the treasurer expects to receive, and then, with economy, to free the Society from debt by the next anniversary, after which the annual income, as calculated from various sources, will be sufficient for their expenditure, with probably a balance of 72*l.* annually in favour of the Society.

Munificent Donation.—We are much gratified to learn, that a gentleman, lately deceased, has willed upwards of twenty thousand pounds to University College Hospital.

Colney Hatch Asylum.—The erection of this asylum for pauper lunatics, with the necessary out-buildings, roads, gardens, etc. etc., has cost 290,000*l.*, the original estimate being 80,000*l.*, to which 34,000*l.* was afterwards added for extras, etc. The difference between the estimate and the real expense is anything but trifling. The asylum ought to be a palace, if its cost be taken into consideration.

The proposition for a Pauper Lunatic Asylum for the City of London has been referred to the consideration of a Committee by the Court of Aldermen.

Medical Fees and the Court of Aldermen.—A question has arisen before the Court of Aldermen respecting the payment of sundry fees (40*l.*) to medical men, engaged to test the sanity of a woman under sentence for poisoning her husband. The result of the inquiry was, that the woman was pardoned; but the charges made by the medical men were contested. As is usual, the matter was proposed to be referred to a Committee, but its further consideration was adjourned.

At a meeting of the Philosophical Society of Glasgow lately, Dr. Penny communicated the important discovery made by him, of the presence of a considerable quantity of potash-salts in the soot from blast iron-furnaces. From the well known value of potash-salts there is every reason to expect that this discovery will prove of considerable importance to those who are interested in these commercial products, and also to iron-masters, who will be enabled to turn to account a substance which has not hitherto been applied to any practical use.

Charity for Hospital Purposes. — Mr. M'Gaul, a Governor of Queen Charlotte's Lying-in Hospital, has offered a donation of 50 guineas, in aid of the building fund, on condition of nine similar sums being obtained for the same purpose. The Wolrige scheme seems to be extending. Among the subscriptions and donations received on behalf of the Hospital for Sick Children, we find one of 105*l.* from Mr. Broadwood; of 50*l.* from Sir John Copley; of 20*l.* from the Right Hon. Sidney Herbert; of 31*l.* 10s. from Dr. Latham; of 21*l.* from Mr. Loyd; of 31*l.* 10s. from Mr. Ray, and of 50*l.* from Mr. Abel Smith, besides sundry smaller subscriptions and donations, amounting altogether to a considerable sum.

Medical Benevolent College.—At a meeting of medical practitioners, residing in the Tower Hamlets, held on February 23, the following resolutions were carried unanimously:—1st. Moved by George T. Dale, Esq., seconded by James Self, Esq., "That the gentlemen present do form a committee, with power to add to their number, for the purpose of aiding the funds for the establishment and carrying into effect the objects of the Medical Benevolent College proposed by John Propert, Esq." 2nd. Moved by R. Wallace, Esq., seconded by John Liddle, Esq, "That two or more of the members of the Committee call upon every qualified medical practitioner in the Tower Hamlets, and all other influential persons who may be willing to assist in the benevolent cause." 3rd. Moved by C. Tatham, Esq., seconded by C. J. Tomkins, Esq., "That the honorary local Secretary be requested to have the foregoing resolutions printed, and that a copy of them, with the Address, be sent to every gentleman previous to the call of the deputation of the Committee."

Progress of Epidemics.—Sickness and death are very prevalent in different parts of Germany, and have increased so much, that the clergy are unequal to the duties of visitation and burial imposed upon them. So severe is the dearth, that predatory bands overrun

the country, carrying off by force the cereals upon the farms, and leading to the fear that the hunger-fever of 1847 and 1848 will be renewed. The population of the Thuringian Forest, and also in the Oberland of Weimar are emigrating on a most extensive scale. The troops under Mr. Thompson, on that part of Africa called "The Sovereignty," in connexion with the Cape of Good Hope, have been afflicted with dysentery. The Arrogant, 46, screw steamer, Captain Robinson, just arrived from the West Indies, reports that the cholera is again prevalent in the northern parts of Jamaica, but that Port Royal is free from it; on the whole the naval station is healthy.

Statistics of the Metropolitan Free Hospital.—A brief table, such as the following, if published by all the hospitals and dispensaries in the Metropolis, would be of considerable interest. It would show pretty clearly the prevalence of disease. The Registrar-General's tables only indicate the mortality. Now the mortality need bear no relation to the prevalence of disease; and at present we have no means of determining the latter:—

Statement of the Number of Patients Admitted under the Care of the Physicians and Surgeons at the Metropolitan Free Hospital from January 1st to December 31st, 1851.

	Medical.	Surgical.	Total.
January	551	250	801
February	654	250	904
March	610	230	840
April	615	277	892
May	800	326	1126
June	717	349	1066
July	961	355	1316
August	1026	309	1335
September	1009	351	1360
October	993	345	1338
November	889	320	1209
December	932	333	1265
	9757	3695	13452

The Number of Patients receiving Medicines and Advice Daily from July 1st to December 31st.

	Medical.	Surgical.	Total.
July	2405	1195	3600
August	2474	1088	3562
September	2378	1002	3380
October	2381	1055	3436
November	2308	917	3225
December	2550	1089	3639
	14496	6346	20842

The Patients were attended by

Dr. Bushnan	2785	Mr. Chance	1488
— Ramskill	3321	— Brooke	1125
— Richardson	3651	— Childs	1082
	9757		3695

Medical patients	9757
Surgical ,,	3695
Cases of urgency taken in	32
Total	13484

Consumption of Opium.—From the Annual Report on Trade, etc., presented to the House of Commons on the 17th ult., it appears, that the quantity of opium entered for home consumption in 1850 amounted to 42,324lbs., and, during the past year, to 50,368lbs., being an increase of 8,044lbs. on that of the previous year, and a considerable increase on that of the preceding years. The total quantity imported in 1851, for home and foreign use, amounted to 106,113 cwts. It would appear, therefore, that there is some truth in the saying, that, as dram-drinking decreases, opium-eating increases.

The Homœopaths.—A scene occurred the other day which pictures rather strongly the difficulties the scrupulous disciples of Hahnemann experience in dispensing, free from all adulterations, their infinitesimal doses. A respectable chemist was quietly dispensing in the old fashioned allopathic fashion, when a gentleman entered his shop, and in a mysterious manner requested a few moments' conversation with him. He was led into a back apartment, and after a few preliminary sniffs, as though to assure himself that no invisible "pharmacie" floated in the air, entered into the object of his visit. "I came to speak to you," said he, addressing the chemist with bated breath, "on a matter of a very delicate nature, and of some little importance." The chemist bowed, and was all attention. "The homœopathic practitioners," continued he, "practising in the neighbourhood, would be glad to know if you would have any objection to dispense their globules." A slight movement of astonishment on the part of the chemist was not unobserved by the stranger. "I do not mean," continued he, in an apologetic tone, "in your ordinary allopathic department, but in a portion of your establishment removed from foreign influences." "Might I ask," said the chemist, "why you apply to me in this delicate affair? I understand that your globules are already dispensed by ——." The stranger put his hand gently upon the speaker's arm. "That was what I was just about coming to," said he. "Mr. S——, to whom you refer, is an admirable person, and has, on the whole, served us well—he is careful to our utmost wishes in a general way, but—he has one little failing. I scarcely like to dwell upon it to a stranger, as it might seem ridiculous. In any one else it would be perfectly harmless, but in a homœopathic chemist it is fatal. He, in short, sir," said the stranger, making a bolt of it, "takes snuff, and we cannot, in consequence—so delicate is the manipulation required, so perfectly free from foreign ingredients—depend upon his doses." "I shall be very happy," said the chemist, "to do my best, but I am in the habit of carrying a camphor bag, and the particles ——." "Oh, camphor," interrupted the stranger, with a slight shrug of horror, "that will be an insurmountable objection. Pardon me for having troubled you, and allow me to wish you a very good morning;" and, bowing himself out, he departed in search of an *unadulterated* chemist.

DEATHS *in the Metropolis for the week ending Saturday, March 6, 1852.*

Causes of Death.	March 6. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	466	399	250	1128	10208
Specified Causes	464	398	248	1110	10171
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases	150	45	12	207	1875
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat	2	29	23	54	523
3. Tubercular Diseases	59	129	8	196	1834
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses	64	32	31	127	1266
5. Diseases of the Heart and Blood-vessels	8	29	12	49	345
6. Diseases of the Lungs and of the other Organs of Respiration	80	62	89	231	2082
7. Diseases of the Stomach, Liver, and other Organs of Digestion	24	26	11	61	579
8. Diseases of the Kidneys, &c.	1	16	3	20	111
9. Childbirth, Diseases of the Uterus	...	11	...	11	106
10. Rheumatism, Diseases of the Bones, Joints, &c.	3	5	2	10	69
11. Diseases of the Skin, Cellular Tissue, &c.	...	...	3	3	14
12. Malformations	2	...	...	2	32
13. Premature Birth and Debility	32	3	...	35	238
14. Atrophy	20	2	1	23	157
15. Age	...	...	40	40	554
16. Sudden	6	1	3	10	130
17. Violence, Privation, Cold, and Intemperance	13	8	10	31	256
Causes not Specified	2	1	2	18	37

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

Sir,—Please ask "Justitia," as he seems so decidedly opposed to surgeons practising as apothecaries, wishing them all if not of that fraternity to be prosecuted for so doing, ought not the surgeons to retaliate, if they had the power (have they?), and mete equal justice out to them for calling themselves what they are not—surgeons?

We want nothing with them. Let each of them "hang out" apothecary, and keep to himself. We can write prescriptions, and remain as we are and should be—a profession, and not a trade. I am, &c.

A Surgeon.

[To the Editor of the Medical Times and Gazette.]

Sir,—I fully anticipated your answer to the first communication of one whom I suspect to be a highly esteemed friend of mine—your Correspondent "Justitia"—would have been so satisfactory as not to have required any justification on my part for what he erroneously, but upon purely honourable motives, deems a breach of professional etiquette.

It is true I was called into consultation, in a purely medical case, with a

gentleman practising in this neighbourhood as a general practitioner, without the legal qualification. It was the first time I had met the gentleman, and previous to that it had been erroneously impressed upon my mind that he possessed no qualification whatever, therefore upon my arrival at the patient's house, which is some miles from this town, I, in the most courteous manner, so as not to hurt the feelings of the gentleman, explained my reasons for declining to meet him in consultation, without being assured that he did possess some professional qualification. Being satisfied upon that point I made no further hesitation.

Your Correspondent "Justitia," and many others, have every reason to complain of those who are allowed with impunity to practise as general practitioners without full and legal qualifications, but I dispute the policy or right of a legally qualified general practitioner to refuse to meet in consultation one who possesses a professional qualification.

I am confident "Justitia" will do me the justice to say, that I have at all times, in the most scrupulous manner, and in many instances to my own prejudice and personal sacrifice, studied to uphold the honour, dignity, rights, and interests of our class, and if I have in this instance stepped out of the course of that professional etiquette which "Justitia" deems I have a right to pursue, I have every reason to flatter myself that my sentiments upon this point will meet with the approbation of a very large majority of a liberal profession.

"Justitia" is well aware, that one of the fundamental principles of the National Institute is to do away with the present anomalous state of professional qualifications; and in order to prevent those unhappy dissensions which so unfortunately distract our profession, a Charter for general practice, and properly defined, must be obtained.

I believe "Justitia" is a member of the National Institute, and if it be policy to accept those with only one qualification as members, he cannot deem it contrary to etiquette for a Member of Council to meet them in consultation even in a purely medical, or a purely surgical case, as it may be.

Ulverston. I am, &c. G. G.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your Correspondent "Justitia" expresses his belief that there are many persons in such towns as Manchester and Liverpool, who are practising as general practitioners without being legally qualified to do so. As regards Manchester itself, "Justitia" is perfectly correct in his belief,—there being at the present time no less than thirty-eight unlicensed persons, with qualifications of one kind or other, in general practice, added to sixteen others who are reputed to possess no qualification at all, to say nothing of the host of druggists who in this much-favoured district labour under the delusion that, provided they do not leave their shops, they are permitted to prescribe for all persons who may apply to them. What a pretty *exposé* there would be should the Society of Apothecaries chance to awake from their plethoric slumbers, and enforce the law against the whole of these persons! Seriously, why does not the clerk to the Society do his duty, and compel these persons to present themselves for examination, or, failing that, put the law in force against them? What, I should like to know, becomes of the fees paid for our certificates? If those members who have qualified themselves for practice are not to be protected from imposition such as this, the sooner the Society is divested of its privileges the better.

I am, &c., FIAT JUSTITIA.

[In the present anomalous state of the laws regulating the granting of licences to practise, the things complained of by our Correspondent will and must be. We fear there is no hope of the evil being remedied till those laws are reformed.]

MEDICAL ETHICS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I find I was not sufficiently explicit in my letter,—a portion of which appeared in your Journal of the 21st ult,—and that I neglected to explain the meaning I attached to the words "poison," "ignorance," "neglect," "mistake," &c. I will therefore submit a case or two, as the best means of explaining what I mean, and in order to enable you to give a definite answer to my questions. A medical man is applied to late at night to prescribe for a patient said to be suffering from derangement of the bowels, without seeing the patient (I should call this neglect.) He sends a bottle of medicine, of which a teaspoonful or one-twelfth part is to be administered three times a-day. A single dose of this medicine (? poison) is given to the patient, who dies from its effects. Now, as it is not to be supposed the patient has been intentionally poisoned, I should say the medical man was "ignorant" of the effects likely to be produced by his medicine Possibly, again, a greater quantity of the "poison" was put into the bottle than was intended: this, I imagine, would constitute a "mistake." Or, take another case: I prescribe a bottle of prussic acid, and direct my patient to take a teaspoonful occasionally. Unfortunately, he dies after taking the first dose. Now, presuming the opinion entertained by some of the Manchester practitioners to which I referred in my last to be correct, should I not be justified, when called upon to explain my conduct, in stating that I was ignorant of what would be the effect of my medicine? I have now, I trust, rendered myself sufficiently explicit, and shall be glad if you will give an opinion whether these cases (supposing any such to occur) would be fit subjects for inquiry by the Coroner; or whether it would be the duty of any strange medical man who might chance to be called in, and who should suspect the real cause of death, to sign a false certificate of the cause of death, in order to screen the "ignorance," "neglect," or "mistake," of his fellow practitioner?

Would it also make any difference if it were discovered that the person prescribing the "poison" was illegally practising as a medical man?

I am, &c.

Rusholme, Manchester. ALFRED CARR, M.D.

[1. We do not think that the case put by Dr. Carr necessarily deserves the name of neglect. 2. If the first practitioner acted according to the best of his judgment, we do not think that the second would be justified in demanding an inquest. 3. With reference to the third case put by Dr. Carr, we think an inquest might, *under some circumstances*, be needed. These answers must conclude the correspondence.]

[To the Editor of the Medical Times and Gazette.]

SIR,—I am well aware that M.B.s of Oxford or Cambridge never assume the title of "Doctor": will you then kindly inform me, why an M.B. of London University does, and whether he is, in every sense of the word, entitled to do so? I myself should feel very loth to assume a title I was not entitled to.

I am, &c. HUMILITAS.

[M.B.s of Oxford and Cambridge do, we believe, constantly assume the title of Doctor, no second examination being needed for the higher degree. An M.B. of the University of London ought not, most assuredly, to style himself Doctor, for this reason, that he has another examination to pass before he receives the degree of M.D.]

Scrutator.—In a late Number of this Journal, Vol. III., p. 665, we requested "all future correspondents regarding Mr. Syme to append their names to their communications." We need hardly say, that what we thus requested was intended to be complied with. "Scrutator," therefore, must append his name to his letter if we publish it, and that particularly as he calls in question many of Mr. Syme's statements.

Royal Medical and Chirurgical Society.—A Correspondent asks if we are aware that the following circumstances occurred at the last meeting of the Royal Medical and Chirurgical Society:—"Dr. Gregory read a paper upon the results of vaccination, which occupied twenty-five minutes. Thereupon Mr. Grainger rose, and made a speech, or rather delivered himself of the substance of the proceedings of the Epidemiological Society for the last eighteen months—a labour which occupied fifty minutes. Thus Mr. Grainger made Dr. Gregory's paper a peg upon which to hang one of his own, delivered, it is true, *vivâ voce*, but prolonged by reference to documents and long-winded quotations." It is hard to stop a member of the Society, but there can be no difficulty with a stranger. Mr. Hodgson, the President, must use more firmness and discrimination. He must exercise his authority with more force if he wish to retain the attendance of the useful and intelligent. Dr. Gregory, we think, was most ungraciously treated. He had prepared a Paper, as condensed as possible, in order to afford time to elicit the opinions of individual members of the Society on topics of great public interest. The result was, as we have seen, that he thus gave opportunity to one gentleman (an entire stranger to the Society) to occupy fifty minutes in giving elaborate statistical data, and who virtually gave a second Paper, which second Paper had neither been submitted to the President and Secretaries, nor come before the Society sustained by the name of a member. Is this fair? Is it just? Dr. Gregory has withdrawn his paper from publication in the Transactions. We hope to give it to our readers.

An Occasional Reader will find all he requires in "Beasley's Druggists' Receipt-book."

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you, in the notice to correspondents next week, have the kindness to give me your opinion upon the following case?—

A lady last year, unknown to me, had some artificial teeth put in by "Mosely," Berner-street, Oxford-street; since that time there has been a complete loss of the natural taste, together with a sad condition of the gums,—boils, &c.; and I also learn, that the gold, when taken out to be cleaned, is much discoloured, being quite green. Will you give me your opinion upon this case; and any suggestion you may feel inclined to make will be much esteemed.

I am, &c. H. W. W.

[We have referred the above to an eminent dentist, who is inclined to think that the state of matters to which our correspondent alludes is due to the presence of diseased roots, which keep up irritation; and that the discoloration of the gold proceeds from the presence of pus.]

In consequence of the length of the interesting Address delivered at the Anniversary Meeting of the Royal Medical and Chirurgical Society, we have been obliged to defer the publication of several communications. The following, however, are in type:—EXCISION OF JOINTS, by G. M. JONES, Esq., Jersey; CASES AND OBSERVATIONS ILLUSTRATIVE of the THERAPEUTIC EFFICACY OF DILUTED HYDROCYANIC ACID as a TOPICAL APPLICATION in CERTAIN AFFECTIONS of the EYE, by JAMES V. SOLOMON, Esq., M.R.C.S., Birmingham; A SKETCH of the MEDICAL HISTORY of the 47TH REGIMENT, by GEO. SAUNDERS, Esq.; OBSERVATIONS on the LOCAL TREATMENT of ULCERS of the LEG, by H. T. CHAPMAN, Esq., F.R.S.; EXAMINATIONS of the EFFECTS PRODUCED by CERTAIN MEDICINES, by C. HANDFIELD JONES, M.B. Cantab; REMARKS on the MICROSCOPIC CHARACTERS of the URINE in BRIGHT'S DISEASE of the KIDNEY, by JOHN MACDONALD, Esq., R.N.

COMMUNICATIONS have been received from—

Mr. CHARLES, of Bangor—On the INCOME-TAX; Dr. PEARSE, of Plymouth—On INDIAN HEMP; Mr. PAVY—PARISIAN HOSPITAL REPORT; Dr. JOHNSON, of King's College Hospital, and Woburn-square—LECTURES (GULSTONIAN) on the PATHOLOGY and DIAGNOSIS of RENAL DISEASES; Dr. TUNSTALL, of Bath—On the PHARMACY BILL; Dr. JOHN DAVY, of Ambleside, and Dr. BLAIR, of British Guiana—On an OUTBREAK of YELLOW FEVER in DEMERARA; A SUBSCRIBER: PONTO; A SURGEON; G. G., Ulverston; A CAIUS MAN; Mr. BULLEY, of Reading; AN OCCASIONAL READER; HUMILITAS; H. W. W., Salford; Mr. FRANKLIN HUDSON, of Daventry; Dr. SHERIDAN MUSPRATT, of Liverpool; Mr. SALT, of Rugely; Mr. GRIMSDALE, of Liverpool—On the FINAL CAUSE of MENSTRUATION; J. J. M.; Mr. SOLOMON, of Birmingham—On the OPHTHALMIC USE of PRUSSIC ACID; Dr. DRAKE, of Exeter—On the USE of the SPECULUM; Dr. SHIRLEY PALMER, of Tamworth; Mr. BERNARD, of the Bristol Eye Hospital—CASE of NÆVUS of the EYELID TREATED on Mr. MARSHALL'S PLAN of RED HOT WIRE: Dr. RIDGE, of Putney—REMARKABLE CASE of GESTATION.

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ORIGINAL LECTURES.

LECTURES
ON
THE PATHOLOGY AND DIAGNOSIS OF RENAL DISEASES;

BEING THE GULSTONIAN LECTURES.

DELIVERED AT

The Royal College of Physicians,

By GEORGE JOHNSON, M.D. Lond.

Fellow of the Royal College of Physicians, and Assistant-Physician to King's College Hospital.

Lecture I.

Mr. President and Gentlemen,—There appears little reason to doubt that the most secure basis for pathological science is an exact knowledge of the healthy structure and functions of the tissues whose diseased states are the subject of study.

With reference to the particular subject of renal pathology, it is a happy circumstance, that the normal structure of the kidney has been more thoroughly and successfully investigated than that of, perhaps, any other important organ in the human body; and it is scarcely necessary to add, that we are indebted for the accurate knowledge which we now possess of this part of minute anatomy, chiefly to the well-known researches of Mr. Bowman.

Before passing on to the consideration of the diseased conditions of the kidney, it may be well to advert briefly to such points in the minute structure of the healthy gland as are intimately connected with certain pathological phenomena to which allusion will afterwards be made. I shall therefore take a rapid review of the microscopical characters and anatomical arrangement of the following tissues:—1. The uriniferous tubes, with their epithelial lining; 2. the Malpighian bodies; 3. the blood-vessels; and 4. the fibro-cellular tissue or matrix by which the parts just mentioned are connected with each other.

The tubes, when traced from the apex of a medullary cone, are found to branch in a dichotomous manner, and to diverge from each other. After passing from the base of the medullary cone into the cortical substance, they cease to branch, and many tubes immediately take a very tortuous course, while others pass on in sets or bundles, and in nearly straight lines, towards the surface of the kidney, and thus give a striated appearance to the cortical substance, which is often very conspicuous in diseased specimens. When they have arrived near the surface, those tubes which formed the middle portion of each straight bundle, at length become tortuous and turn backwards into the deeper portions of the cortical substance. Each tube terminates in a spherical expansion, which forms the capsule of the Malpighian body. The renal artery, which enters the kidney at the hilum, after sending some twigs to the cellular tissue and fat which lie outside the pelvis, breaks up into small terminal branches, which, passing towards the Malpighian capsule, have been named by Mr. Bowman, the afferent vessels of the Malpighian bodies. Each afferent vessel pierces the Malpighian capsule at the point opposite the junction of the tube, and, thus passing within the cavity of the capsule, it breaks up into a plexus or tuft of capillaries. This tuft or plexus is again collected into a single efferent vessel, which pierces the capsule near the afferent vessel, and conveys the blood from the Malpighian body to a second capillary plexus lying on the exterior of the tubes among their coils and convolutions. This inter-tubular plexus again communicates with the emulgent vein, the commencing branches of which form those hexagonal lobular divisions which are visible on the capsular surface of the kidney.

The course of the circulation through the kidney, therefore, is from the renal artery through the afferent vessels into the Malpighian capillaries, thence through the efferent vessels into the inter-tubular plexus, and from this into the emulgent vein.

Returning now to the Malpighian bodies, we find that each is composed of a capsule enclosing a tuft of capillaries. The capsule is formed by a continuation of the basement membrane of the tube, which is expanded over the vascular tuft. The cavity of the capsule communicates with that of the tube; and at the point opposite the opening of the tube, it is pierced by the afferent and efferent vessels, to which it is closely adherent.

No other tissue enters the Malpighian capsule with the vessels. The capillaries are entirely uncovered, having no cells upon their surface, nor any connecting tissue between their coils. A delusive appearance of cells on the surface of the Malpighian capillaries is sometimes observed when, the capillary walls being thickened by disease, the blood corpuscles within the vessels appear colourless and magnified as seen through the thickened tissue which encloses them. A careful examination will show, that the bodies referred to are in the canal of the vessel, and not on the surface, which is clear and smooth when seen in profile; and the addition of acetic acid to a healthy Malpighian tuft when full of blood, has the immediate effect of decolorising the blood, and giving its corpuscles the same appearance as in the cases just mentioned.

I have hitherto said nothing of the epithelium of the kidney. The tubes are composed of two distinct structures—the basement membrane and the epithelium. The basement membrane is a homogeneous transparent structureless tissue, which forms the outer boundary of the tubes, and expands, as I have already described, into the capsule which encloses the Malpighian tuft of capillaries.

The epithelium covers the deep inner surface of the basement membrane; it is a tissue of great interest, and differs materially in different parts of the tubular tract which it occupies.

The only part of the Malpighian body which has any epithelium within it, is that portion of the inner surface of the capsule which is contiguous to the opening of the tube. This part of the capsule is covered by a single layer of transparent flattened cells without distinct nuclei, which gradually become thinner in passing from the orifice of the tube, until they quite disappear near the middle of the capsule. At the neck of the capsule, the epithelium entirely changes its appearance, and assumes the character of that which, from its form, is called "spheroidal," and, from its physiological office, "glandular or secreting epithelium."

The cells have a more or less rounded form, and are thus distinguished from the flattened particles of the lamelliform or scaly variety of epithelium. They form a single layer, covering the inner surface of the basement membrane, and they occupy about one-half the diameter of the tube, leaving a canal in the centre, the diameter of which is rather less than the combined thickness of its epithelial walls, so that a tube with an entire diameter of $\frac{1}{350}$ inch would have a free canal with a diameter of from $\frac{1}{900}$ to $\frac{1}{1000}$ inch. I shall presently show that a knowledge of these relative measurements has a practical value, and sometimes forms an important element in diagnosis and prognosis.

The epithelial cells in question are granular and opaque, and appear to contain a considerable quantity of solid matter. Their walls are very delicate, and, when water is added to the specimen the cells frequently fall in pieces very rapidly. They have one distinct nucleus, sometimes two, and in the centre of the nucleus a nucleolus is often visible. Occasionally they contain one or more minute oil globules. I at one time believed that this was characteristic of the healthy renal cells, as it undoubtedly is of the hepatic cells; but although the renal cells frequently contain minute quantities of oil when there are no very decided marks of disease in the kidney, yet I am now convinced that it is rare to find oil in the cells unassociated with other appearances of a deviation from the strictly normal condition of the epithelium.

The epithelium which lines the straight tubes of the medullary cones differs essentially from that of the convoluted tubes, and resembles more the lamelliform or pavement variety. Its particles are here smaller, and more flattened than in the convoluted portions of the tubes, so that the epithelium is thinner in proportion to the diameter of the tube, while the canal is larger than in the convoluted tubes. The cells have smooth and transparent walls, and their contents have not the opaque and granular appearance which is characteristic of the glandular epithelium which I have just now described.

There is one characteristic of the renal epithelium which has hitherto been observed only in the lower animals,—I allude to the presence of active vibratile cilia upon the cells.

Mr. Bowman first observed this interesting phenomenon in the Malpighian capsule, and the contiguous portion of the tube, in the frog. It has since been observed in other reptiles and in fishes, and it has been found that the cilia exist throughout the whole length of the uriniferous tubes.

The cilia may be well seen in the newt's kidney, the anterior extremity of which is thin and transparent, so that it may be subjected to microscopical examination without previous cutting or tearing. The cilia move with great rapidity; the current of liquid which they produce within the Malpighian capsule is directed into the orifice of the tube with great precision, and thence it is driven onwards, being continually propelled by the quick lashing of the cilia which cover the inner surface of the tube. Few microscopic objects are more surprisingly beautiful than a piece of the newt's kidney when, as frequently happens in a favourable specimen, every tube in the field has its cilia in active motion, producing currents of liquid which wind onwards with great rapidity through the convolutions of the tubes.

I am not aware that the cilia have been seen in the kidneys of birds or mammalia. It is not unlikely that they exist even in man; but there is an apparently insuperable difficulty in the way of their being seen, which is this, that they are not visible when they are at rest. Such, at least, is the case in reptiles. I have watched them in the newt's kidney until the motion has ceased, when they appeared to collapse upon the surface of the epithelium, and so became invisible, even when their previously active motion had indicated their exact position.

The *fibrous matrix* of the kidney was first accurately described by Professor Goodsir. A specimen may readily be prepared for examination by making a thin section of the cortical substance, and washing it with a brisk motion in water. By this means the tubes and Malpighian bodies are removed, leaving the empty meshes of the matrix. The tissue is arranged in the form of fibrous rings, the smallest of which encircle the tubes, and the larger ones contain the Malpighian bodies. The inter-tubular capillaries are enclosed in the fibrous tissue, in the substance of the rings, and with these they encircle the tubes. This tissue has been the source of more than one error in anatomy and pathology. When the tubes are enclosed in the matrix, they often appear to be mapped out, as it were, into distinct circular or oval portions,—an appearance which has probably given rise to the notion, that the tubes terminate in blind extremities; while certain diseased conditions of the tubes, in which they lose their epithelial lining and become transparent, give them, when packed in their fibrous rings, so much of a vesicular appearance, that it is scarcely surprising that they should have been described as vesicles.

There is yet another error into which pathologists have fallen with regard to this matrix. Being either ignorant of its existence in the healthy kidney, or forgetful of the fact when prosecuting their pathological researches, they have mistaken it for a product of disease, and have described it as a development of fibrous tissue, encircling the tubes, constricting them, and producing atrophy.

It will be unnecessary to say more than a few words on the physiology of the kidneys. The function of these organs is to discharge from the body a certain quantity of superfluous water, and with this some solids, most of which, if not all, exist ready formed in the blood, the duty of the kidney being merely to separate them. A suspension, or a great impediment, of the secretory action of the kidney, is followed by the accumulation of urinary excrement in the blood, and the occurrence of urgent and more or less rapidly fatal symptoms.

There is no reason to doubt the accuracy of Mr. Bowman's doctrine with regard to the functions of the Malpighian bodies; that they are the means by which the watery portion of the urine is secreted, while the characteristic solid constituents are eliminated by the agency of those epithelial cells which line the convoluted tubes.

The structure of these cells—possessing as they do all the characters of true glandular epithelium, is conclusive as to their office; while, in all respects, the Malpighian bodies differ from the secreting parts of true glands. The epithelium changes its character immediately on entering the Malpighian capsule; it becomes transparent, and soon ceases entirely. The vessels lie on the deep surface of the basement membrane, and are entirely uncovered by any epithelium. "It would, indeed, be difficult," as Mr. Bowman suggests, "to conceive a disposition of parts more calculated to favour the escape of water from the blood than that of the Malpighian body. A large artery breaks up, in a very direct manner, into a number of minute branches, each of which suddenly opens into an assemblage of vessels of far greater aggregate capacity than itself, and from which there is but one narrow exit. Hence must arise a very abrupt retardation in the velocity of the current of blood. The vessels in which this delay occurs are uncovered by any structure. They lie bare in a cell from which there is but one outlet, the orifice of the tube. This orifice is encircled by cilia, in active motion, directing a current towards the tube. Why is so wonderful an apparatus placed at the extremity of each uriniferous tube, if not to furnish water, to aid in the separation and solution of the urinous products from the epithelium of the tube?"

The epithelium of the straight tubes, as I have already mentioned, is allied to the lamelliform or pavement variety: it has no glandular function, the tubes which form the medullary cones being merely ducts for conveying the urine from the convoluted tubes into the pelvis of the kidney.

The precise mode in which the glandular epithelium separates its peculiar products from the blood, and discharges them into the ducts, is a mystery which has not yet been solved. It is probable that the cells continually pass away in the secretion, and that they are as constantly replaced by new formations; but, whatever may be the process by which these changes are effected, *no entire gland-cells, nor even the* débris *of renal epithelium are normally visible in the urine.* I shall presently show that the appearance of renal epithelium in the urine affords unequivocal evidence of disease.

In treating of so extensive a subject as the pathology of renal diseases in the brief space of time which is allotted to me, I must, of necessity, omit all mention of some points, and allude to others in a more cursory manner than under other circumstances would be desirable. I shall, perhaps, avoid the necessity of some repetition hereafter, and succeed in making my meaning more intelligible as I proceed, if I commence by a brief statement of certain general propositions, which I hope to establish to your satisfaction, and around which, as central truths, the particular facts and arguments which I shall have to adduce will be found to arrange themselves. The general propositions are these:—

1. Diseases of the kidney have their origin in a morbid condition of the blood. Of course, I do not include in this general statement diseases resulting from causes which are obviously local, and even of a mechanical nature, such as the morbid states of kidney consequent upon the irritation of calculi, retention of urine, and other mechanical injuries. But the class of cases to which this general proposition is in an especial manner applicable, is that numerous one which includes the diseases of the kidney, attended by the secretion of albuminous urine,—the various forms of what is commonly called "Bright's disease." My second general proposition is, that as the diseased conditions of the kidney result from an effort made by the gland to eliminate from the blood some of its abnormal constituents the first perceptible morbid change occurs in the secreting epithelium which lines the convoluted tubes.

The third proposition follows upon the second, and is to the effect, that the pathological changes which affect the vessels are consequent upon an antecedent morbid condition of the glandular epithelium.

Lastly, many of the pathological changes which the renal tissues undergo may be shown to have an essentially beneficial object and tendency, while others among the morbid phenomena are either necessary or accidental ill consequences of pathological conditions which have primarily a wholesome tendency.

I shall endeavour to make these general propositions intelligible as I proceed.

A few remarks upon morbid conditions of the blood as a source of renal disease must suffice for this part of our subject. From a consideration of the circumstances in which renal diseases occur, it appears that an abnormal state of the blood must be a very frequent, if not a constant, condition. Thus, it is well known that scarlatina is one of the most frequent causes of acute renal disease, while measles and erysipelas are less frequently associated with this malady. The same form of disease occasionally occurs in connexion with purpura, and with other cutaneous affections which are with reason supposed to depend upon a morbid condition of

the blood, such as an extensive eruption of eczema, impetigo, or ecthyma, or continuous outbreaks of boils or carbuncles. Renal disease is not unfrequently set up during the convalescence from acute diseases, such as have their origin in a diseased state of the blood, or which are known to induce great changes in the composition of that liquid. I may mention as instances typhus and rheumatic fever. Again, the kidneys frequently suffer in cases of such chronic diseases as greatly reduce the vital powers and impair the nutrition of the body. This is sometimes found to occur in connexion with diseases of the joints or bones, whether scrofulous or syphilitic. One of the most frequent causes of renal disease among hospital patients is an insufficiency of nutritive food; and one not less frequent is the intemperate use of alcoholic drinks. A suspension or a great impairment of the functions of any other important excretory organ will sometimes excite disease in the kidney. Thus any form of pulmonary disease, which greatly interferes with the aëration of the blood, whether the disease be primary or consequent upon disease of the heart, will occasionally induce structural changes in the kidney. There is reason to believe that a like result sometimes follows disease of the liver, and it is well known that exposure of the body to cold and wet is one of the most fruitful sources of renal disease, the explanation of which is to be found partly in the suppression of the natural cutaneous secretion, and partly in the check which such exposure may give to the escape of morbid matters from the surface of the body. In this way we account for the almost certain and constant effect of cold in exciting renal disease, with dropsy, while the blood is infected by the poison of scarlatina. Lastly, the gout, a malady by universal consent admitted into the category of humoral diseases, is very frequently associated with some degree of renal degeneration.

The facts to which I have thus briefly referred will suffice to show, not, indeed, in a demonstrative manner, but with a great degree of probability, that renal diseases have their origin in a morbid condition of the blood; and this position will be assumed as a central fact in my attempts to explain the pathology of these diseases.

[To be continued.]

ORIGINAL COMMUNICATIONS.

DYSMENORRHŒA.

By EDWARD RIGBY, M.D., etc.

Senior Physician in the General Lying-in Hospital; Examiner in Midwifery in the University of London.

The cases of dysmenorrhœa which I have ventured to present to your notice in the present series have been those purely of an obstructive character, depending on a constricted state of the os uteri and canal of the cervix, especially the os uteri internum, and I presume of a congenital formation. The two following cases also are, strictly speaking, cases of obstructive dysmenorrhœa, but must be looked upon rather as modifications, inasmuch as the obstruction evidently does not depend on congenital constriction, because the patient has not always been a sufferer from dysmenorrhœa, having menstruated with perfect ease either until her marriage, until after her first labour, or some other event, or in the midst of menstrual periods attended with the severest dysmenorrhœa of an obstructive character she will pass two or more with perfect immunity from suffering. From an attentive consideration of these cases, I am induced to suppose that they are, in great measure connected with a swollen and congested condition of the mucous membrane lining the os uteri and canal of the cervix, and depending on an unhealthy condition of the circulation, the result of deranged assimilating functions. A similar state of the mucous membrane is known to exist in the vagina and urethra; it is familiar to every practitioner in the throat, air passages, and conjunctiva: is attended with a furred tongue and unhealthy secretions, and may be more or less relieved by medicine given for the purpose of improving them. I do not pretend to say that this species of obstructive dysmenorrhœa (depending on a swollen state of the mucous membrane lining the os and cervix uteri, the result of general derangement) is to be cured merely by attention to the general health, because in the cases which I have seen the canal of the cervix and the os uteri have always been small, though not sufficiently so to have obstructed the escape of the catamenia as long as the parts were in a healthy condition; hence it will be seen that the treatment is essentially the same, viz., rectifying as far as possible the derangements of the general health, and effecting a sufficient degree of dilatation to ensure an easy escape of catamenial fluid and a cessation of uterine irritation.

Mrs. H., aged 30, married 8½ years, never pregnant.

April 19, 1849.—Emaciated. Intense suffering at the catamenial periods, coming on sometimes a day, at others only an hour, before the discharge appears. The pain comes on suddenly, and quite prostrates her; the discharge is very scanty, with clots and exudations.

She has been occasionally quite free from these attacks for periods of three, five, and even nine months. At times she suffers severe pain in the left ovarian region.

The bowels are unhealthy; she grinds her teeth when asleep; the urine is thick and high-coloured; the tongue is pale, flabby, and coated; says that she has a tendency to piles; has frequent flushing and sense of swelling and pricking of the vagina increased by standing, with pain of the back; leucorrhœa; right breast enlarged and painful.

Examination per Vaginam.—Os and cervix small. Uterine sound meets with an obstruction at about half an inch from the os tincæ, it then passes over what appears to be a fold of membrane to the natural extent of 2½ inches in the right direction, bringing away much thick white albuminous mucus. I passed the dilator, and dilated slightly.

℞ Pil. hydr. gr. iij., ferri sulph. gr. ij., extr. coloc. co. gr. v. M. ft. pil. ij., omni nocte sumendæ.

℞ Acidi hydrochlor. dil., acidi nitrici dil. ʒi., extr. taraxaci ʒi., infusi gentianæ co. ad. ʒviii. M. ft. mistura cujus sumat cochl. magna ij. ter die.

27th.—Medicine acted well. Tongue pale; has felt better since; expects the catamenia in four or five days. Bowels appear to be still loaded.

Examination per Vaginam.—Os uteri forwards; fundus evidently backwards and to the left side. I dilated again.

Rep. pilulæ et mistura.

℞ Ferri sulph. gr. ij., acidi sulph. dil. ♏viii., magnesiæ sulph. ʒi., syrupi rhœados ʒss., aquæ menthæ pip. ʒi. M. ft. haustus primo mane sumendus.

I advise her to use the prone position as much as she conveniently can.

May 7.—(By note.) The catamenia appeared a few days ago; the discharge was much less than usual, it came "perfectly free from pain;" during the period the urine was much loaded with lithates. The bowels have been well acted upon by medicine, but they are still offensive and slimy. Rep. omnia.

17th.—Better. Pulse still weak. Rep. omnia.

June 2.—Catamenia on the 23rd ult., nearly three weeks since the last period; the discharge came on without pain, and was natural in appearance. Pulse good; tongue dry, rough, and brown at the back; bowels moved twice or three times daily, and by no means so offensive; urine is turbid occasionally. She has still a bad taste in her mouth. Rep. omnia.

9th.—General health still improving. Rep. misturæ.

℞ Extr. aloes aquosi ℈ii., extr. hyosc. ℈iss., masticbes gr. xij. M. ft. pil. xx. Sumat i.—ij. h. s.

I regret that the details of this case have not been taken so carefully as could have been wished; and an important omission occurs at the very outset, viz., as to when she was first a sufferer from dysmenorrhœa. I believe that she dated it from the time of her marriage; but the considerable functional derangement, as evinced by the loaded and unhealthy state of bowels, the turbid urine, etc., and the occasional periods of perfect freedom from suffering at the catamenial periods, showed that the dysmenorrhœa was by no means entirely dependent on permanent mechanical obstruction, but on occasional engorgement and swelling of the membrane lining the canal of the cervix; this may be inferred by the attacks of flushing and sense of swelling which she experienced about the vagina, which were very

near akin to that condition of the uterus in a rheumatic gouty state of the system, which, for want of a better term, I have called uterine gout. The examination showed that the os and cervix were small, and the manner in which the sound was arrested, and grated (as it were) over a rugous surface, confirms this opinion. One point of difference between this case of obstructive dysmenorrhœa and those which arise from permanent constriction was, that the sound did not pass beyond the ordinary extent of two and a half inches, showing that the uterus was not habitually distended at the menstrual periods by accumulations of retained catamenia. Hence I should be inclined to attribute the amount of retroversion, which I distinctly found at my second examination, to the loaded state of bowels and the general want of tone in the system.

That dilatation produced great relief there cannot be a doubt, but the cause was too clearly of a functional character to justify my depending on this local mechanical remedy for her cure. I accordingly pushed on steadily with the course of alteratives, laxatives, and tonics, which were so strongly indicated; and I may again be allowed to point out the great value of the combination of sulphate of iron and magnesia under such circumstances.

I will now pass on to the consideration of those cases which I classed under the head of "functional dysmenorrhœa," in contradistinction to the mechanical form which I have just been considering. The proximate causes of this painful affection are uterine or ovarian irritation, depending on general irritability, derangement of the system from mal-assimilation, rheumatic or rheumatic-gouty habit; or of a more local character, as retroversion of the uterus and its attendant ovarian irritation, inflammation of the cervix, or the irritable state of the uterine system after abortion. Of these, by far the most frequent are the various derangements resulting from mal-assimilation,—whether these be hepatic, gastric, or intestinal, they are sure to influence, more or less, the uterine system at these periods. Where continued mal-assimilation has laid the foundation of a rheumatic or rheumatic-gouty habit, the painful menstruation is seen in connexion with that series of symptoms, which, for want of a better term, I have denominated "uterine gout." As to the other causes of a more local character, I will consider them apart as separate affections. Dysmenorrhœa has been considered to be the occurrence of a menstrual period during the presence of high uterine irritability, amounting almost to a state of inflammation, and attended with the formation and expulsion of exudations of fibrinous matter from the lining membrane of the uterus, upon which the suffering appeared in great measure to depend; but there can be no doubt that severe dysmenorrhœa may occur without any exudation whatever; nor is an irritable or almost inflammatory state of the uterus a necessary condition to the formation of these exudations. I have long felt convinced, that the fibrinous shreds and portions of membrane which are expelled in certain cases of dysmenorrhœa are dependent not so much on uterine as upon ovarian irritation. From careful and pretty extensive observation, I think I may assert, that I have never seen a case of oophoritis or of ovarian irritation which was not attended with fibrinous exudations; and, *vice versâ*, that I have never seen these exudations in dysmenorrhœa where there were not also well-marked symptoms of ovarian tenderness and irritation; and when we recollect the changes which take place in the lining membrane of the uterus in the formation of the decidua during a period of high ovarian excitement, viz., the impregnation of an ovum, and its expulsion from the Graafian capsule, I think that this view, which I have advocated for some years, will not appear improbable. As far as I have had the opportunity of observing, the formation also of coagula, in many cases, (not all,) is connected with a similar cause.

One distinguishing point, as I have already observed, is the fact, that the pain does not necessarily precede the discharge, as in the dysmenorrhœa from obstruction which I have just been considering; more frequently it comes on nearly simultaneously with it, and occasionally not till some time after the discharge has appeared. Not uncommonly the discharge comes on without pain, and, after continuing scantily for a time, again ceases. The pain now commences, and continues with great severity until the discharge returns, which appears to relieve it; in other cases it does not abate until the discharge has attained its full amount, and has begun to subside; in other cases, which appear to be somewhat of a neuralgic character, the pain does not come on until the discharge has ceased.

Miss J., aged 34; small, brunette, sallow, pale.

Dec. 18, 1850.—Intense suffering at the catamenial periods, which are quite regular in point of time. The discharge commences for an hour or two, and then the pain (which is entirely confined to the left groin) comes on with the greatest severity, for about two hours of which time she usually retches violently until the pain begins to abate. During these attacks the bowels are spontaneously purged; the discharge is very sparing, like coffee-grounds, and is mixed with shreds of fibrinous matter; the appetite is good; she can take exercise, and is able to keep the extremities warm, but the skin is dry, the bowels confined and offensive, the urine very turbid, the sleep disturbed; the tongue rough, furred towards the back, with red papillæ at the tip. Occasional slight leucorrhœa. Expects the next period in ten days. Has suffered from dysmenorrhœa from the first appearance of the catamenia.

Pil. hydrarg. chloridi co. gr. v., alternis noctibus.

℞ Ferri sulph. gr. ij., magnesiæ sulph. ʒi., acidi sulph. dil. ♏vii., syrupi rhœados ʒss., aquæ menthæ pip. ʒj. M. ft. haust. primo mane sumendus.

℞ Potassæ bicarb. ℈iv., potassæ nitratis ℈ij., sp. ætheris nitr. ʒss.; aquæ menthæ pip. ʒviij. M. ft. mistura, cujus sumat cochl. magna ij. bis die post cibum.

℞ Linim. camphoræ co. ʒijss., tinct. opii ʒss. M. ft. linim. parti dolenti applicand.

℞ Pil. saponis c. opio, gr. v. Ft. suppositorium dolore urgente adhibend.

Let her wear elastic merino next the skin.

January 11, 1851.—Considers that she has been "decidedly better," until she caught a severe cold, with some degree of sore throat. The period came upon the second, with scarcely any pain; had no spontaneous diarrhœa; appearance of the discharge quite natural, and without shreds; no pain of groin; tongue natural; sleeps well; looks better.

Sumat pil. hydrarg. chloridi co. gr. v. semel in septim. Rep. alia.

31st.—Another period "has passed without pain or retching," and she has felt well since. Does not take the saline mixture regularly.

Rep. omnia.

February 22.—Writes word that she has passed a third period, and has entirely escaped the pain in her left side. Will call upon me shortly.

March 3.—Looking much better; bowels regular without medicine; appetite good; tongue improved; no red papillæ; she never perspires. Rep. pil.

℞ Acidi hydrochlor. dil., acidi nitrici dil., aa. ʒj., liquoris taraxaci ʒj., infusi gentianæ co. ʒvj. M. ft. mistura, cujus sumat cochl. magna ij. ter die.

10th.—Says that the mixture disagrees with her, and produces flatulence, etc. etc., which I am inclined to doubt.

Rep. pil. mist. ferri et magnesiæ sulph., et mist. nitro-muriatica ex infuso gentianæ.

April 12.—Looking better; catamenia appeared on the 8th; only three days before the full time (which is now her ordinary habit) and without either the retching or pain of groin; appetite and bowels good; tongue pale, but foul.

℞ Pil. hydrarg. gr. v., h. s. p. r. n.

℞ Ferri citratis ℈ij., acidi citrici ʒij., aquæ destillatæ ʒviij. M. ft. mistura.

℞ Potassæ bicarb. ʒij., syrupi aurantii ʒj., aquæ destillatæ ʒvij. M. ft. mistura, cujus sumat cochl. magna ij. ter die, cum pari misturæ superscriptæ inter effervescendum portione.

The situation of the pain in this case, "entirely confined to the left groin," indicates that the left ovary was the chief seat of suffering, and the appearance of the discharge confirms this view. The attacks of diarrhœa which attended the catamenial periods, justify the supposition that the habitually confined and unhealthy bowels were probably the cause of the ovarian as well as intestinal irritation which occurred at those times; and this is further proved by the result of the treatment. The bowels were brought into a healthy condition by a course of mild alterative and laxative medicine, she used a small opiate suppository at the period, and, in due time, I ventured to put her upon a course of tonics.

Berkeley-square.

EXCISION OF JOINTS.

By G. M. JONES, Esq.
Surgeon to the Jersey Hospital.

When we consider the many diseases to which the bones of the human frame are liable, and the various forms they assume, some resulting from accident or violence, others arising from constitutional, or similar causes, it cannot be a matter of surprise that there should be, perhaps, no point of his profession on which the surgeon has written more, or which has occupied his attention in a greater degree, than that which treats of the means by which affections of the osseous system may be arrested in their progress, or altogether cured. (a) Cases do occur, and, unfortunately, they are by no means rare, which linger on to a fatal termination, let the treatment be what it may; but if, on the one hand, we are at times disappointed in the endeavour to effect a cure, we cannot, on the other, but entertain a hope, that as causes and effects become better known than at present, the researches of the physiologist, and the brilliant discoveries of the modern anatomist, will enable us to overcome those diseases which have hitherto been considered incurable.

For a considerable time, but more particularly during the last few years, the operation of excision, or the resection of a portion, or the whole of a joint, has occupied much of the attention of the surgical world.

To save a valuable limb by the comparatively trifling loss of the joint, is unquestionably one of the greatest triumphs achieved by modern surgery; and yet this operation, the benefit of which is so incalculably great, is not, I am persuaded, resorted to as often as it might be. The apparent difficulty attending it; the dread of failure, and perhaps the far greater dread of censure incurred by attempting that which our forefathers never practised, nor even thought of; the disinclination to deviate from rules laid down in works, valuable in their day, but which recent discoveries have left far behind; or the impression, that the greatest wisdom lies in following the safest, to say nothing of the least troublesome course, deters many a provincial surgeon from attempting that which is accomplished by the most celebrated men of the age, and is sanctioned by the highest authorities. (b)

When an experiment in medicine or surgery is attended with success, it becomes the duty of the experimenter to record the result of those cases which may be regarded as valuable acquisitions to either branch of science. Equally does it behove the general practitioner to make known how far the suggestions and experiments of others have been successful in his hands, in order to enable the Profession at large to estimate the value, or guard against the evil consequences which have been found to attend them. Nor should disappointment, as to the favourable termination of a case, deter him from this course, for much in a practical point of view may be learned from his failure as well as from his success, while the latter points out how far he may be followed with confidence; the former, acting as the chart to the mariner, guards others against those dangers which, having been found fatal to his hopes, will most probably, with equal certainty, prove destructive to theirs.

In accordance with these views, and in the hope that they may prove useful to others, I have, by the advice of some of my medical friends, been induced to publish the following cases.

Case 1.—Sarah Hansford, aged 25, of prepossessing appearance, and in many respects far superior to the generality of females in her class of life, was admitted into the hospital on the 1st of January, 1851, on account of a disease of the left knee. She gives the following history of her case:—

When nine years old she had a severe attack of chorea, and, at the same time, or shortly after, experienced great pain in the knee, accompanied, she believes, with inflammation, as leeches were applied to it. She had frequently been exposed to wet, having been employed for days together to "frighten away the birds" from her father's crops. The affection of the knee has continued from the time above alluded to, which has very rarely been entirely free from pain, and has always been considerably larger than the right one. The catamenia came on when she was 16, and has continued regular ever since. At 17 she married, and is now the mother of three children. At one time she was three weeks in the Bath Hospital; there the knee was blistered, and several issues were made, and she appeared at the time to derive benefit from the treatment pursued. In April, 1848, the diseased joint became so painful, that she applied for admission into the Reading Hospital, and continued there till the following August, under the care of Mr. May. To this gentleman's kindness I am indebted for the following report of her case at that time:—"Disease of left knee, involving synovial membrane, probably cartilage, and also ligamenteus and cellular tissue; knee much enlarged, the slightest movement gives pain." Treatment pursued.—"Gutta-percha splints, iodine externally and internally, afterwards blisters, and on May 28th discontinuance of the iodine. June 20th.—Pressure borne on the knee. Soon after (27th of July), she was discharged, with following report:—Knee much better than could have been expected. To persist in the same treatment until all pain and uneasiness have disappeared; and then, by keeping the limb at rest and in the same position, anchylosis will probably be the result."

The treatment recommended was followed but for a short time. After leaving Reading Hospital, no other surgeon was consulted; but, like many others, she became the dupe of impostors, who, for the sake of the few shillings *paid in advance*, promise a cure from the use of specifics and whose promises, like their nostrums, serve only to injure and mislead. For the last two years she has been unable to walk without the assistance of crutches.

Present Appearance.—The affected joint is very much enlarged, more particularly on the inner part; it is exquisitely tender on pressure. The swelling throughout is elastic and glossy, and the superficial veins very much enlarged. The knee presents, in an aggravated form, the appearance described by Mr. May. For the last few months she has suffered more in it than she had done at all; she sleeps but little in consequence of frequent lancinating pain, and this little is unrefreshing; she has scarcely any appetite. Pulse ranges from 100 to 105; has lately perspired freely towards morning. States that she has become much thinner.

As there could not exist a doubt respecting the nature of the case, or that the disease was progressing rapidly, it was decided, in consultation, that, in consequence of the absence of any very formidable symptom, this was possibly a case in which excision of the joint might prove successful; and, as the patient was willing to submit to any operation or treatment, save the removal of the limb, she cheerfully acceded to a proposal which her repugnance to losing her leg had in a great measure suggested.

On the 19th, one week after the cessation of the catamenia, the operation was performed (the patient being under the influence of chloroform) in presence of several of my medical friends, some of whom kindly assisted me on the occasion. The patient was so placed on the table as to allow the leg and the greater portion of the thigh to hang over it. As a very minute examination, together with the appearance of the knee, indicated that extreme disease existed, I made my lateral incisions midway below and above each side of the joint, about five inches in length, cutting at once down to the bone. These were united by a transverse one, carried across immediately over the centre of the patella. The flaps were then dissected backwards and forwards, and the patella, which was soft and spongy, removed; the surrounding soft parts of the femur were then

(a) In all surgical museums it will be found, perhaps without a single exception, that the different preparations of bones out-number the specimens of the other parts of the human frame; and, if I am not mistaken, full one-third of the deservedly celebrated museum of the Hunters consists of bones in their diseased and healthy state. This need not surprise us, when we consider that the bones are more liable to disease than any other part of the body.

(b) I cannot altogether enter into the views of those medical men and others who consider that no important surgical operation which admits of delay ought to be undertaken by provincial surgeons. No one has greater reason than myself to feel that the metropolis is the fountain-head of all medical and surgical knowledge, and the great focus from which emanates all that is interesting and valuable in either branch of science, but it is not in the power of all to be treated there, and, consequently, it is our duty to think more of our patients, and less of ourselves, and not to allow the paltry consideration of the personal effect of probable failure to outweigh that which is of far greater importance—the future comfort, perhaps the very existence, of a fellow-creature. Notions of this kind are not alone of to-day, for when I commenced my professional career, they were brought forward here as much as at present, and that too at a time when one who, in the strictest sense of the word, was "born a surgeon"—whose great anatomical knowledge and operative surgery were spoken of by the late Sir Astley Cooper in terms of the highest commendation, and whose thorough knowledge of his Profession would have reflected credit on any London hospital, was in the prime of life. I allude to Dr. Fisott, sen., now the oldest established, and one of the most respectable practitioners of this island.

cautiously detached as high up as disease appeared to exist, and the crucial and lateral ligaments were divided; this allowed the assistant who had charge of the leg at once to bend it backwards, while the other raised the thigh from below upwards. By this means considerable facility was afforded for clearing the posterior part of the femur of its different attachments. The joint thus exposed discovered the cartilaginous surfaces of both femur and tibia destroyed by ulceration, and a considerable portion of the osseous surfaces in a state of caries. There was pus external to the joint as well as in the joint itself. The removal of the diseased part of the femur was accomplished with the common amputating saw; a large portion of the head of the tibia was also taken off with the same instrument. The fibula was found sound; neither spatula nor retractor was used. The hæmorrhage was very trifling; no vessel required a ligature. The length of bone removed was four inches. The edges of the wound were now brought together with sutures and a few adhesive straps, the bones placed in juxta-position, cold-water dressings applied, and the limb secured in a modern apparatus (in some respects similar to Sir Astley Cooper's fracture-box). The whole of the operation occupied twenty minutes.

The patient returned to consciousness very soon after being placed in bed. The pulse was extremely feeble and correspondingly quick, extremities cold, and features somewhat attenuated. She evinced much surprise on finding that the operation was over. Warm flannel was applied to the hands and feet, and brandy and water given. The pain being excessive two hours after the operation, fifty drops of tinct. opii. in camphor julep were taken. She has experienced much nausea, and has vomited twice, evidently the effects of chloroform, as similar symptoms occurred three days before, when its effects were tested on her.

9 p.m.—Still suffers much pain, and is inclined to be restless, but not to the same degree as before the anodyne. Has taken nearly a pint of strong beef tea, with pepper in it.

The anodyne (same quantity) to be repeated.

Midnight.—Has slept by snatches since the last visit; pulse, 115 and weak; much less nausea.

Beef-tea to be continued, and port wine and water to be taken occasionally.

20th, Mane.—Has slept about two hours, and altogether feels more comfortable. No heat whatever of the limb. Pulse 110, very feeble; tongue moist, but rather coated. No return of vomiting or nausea.

A glass of port wine every three hours, each glass to be preceded by one ounce of quinine mixture equal to two grains per dose. Beef-tea *ad libitum*.

Vespere.—Pulse 106; feels comfortable; but little oozing from the wounds; some tenderness, but only on pressure; tongue moist. The affected leg and foot the same temperature as the other. The kidneys act freely.

Continue the same.

21st, Mane.—Has had rather a sleepless night; not, however, occasioned by pain, as the leg feels easy, and remains in a comfortable position. Pulse 102, much stronger, and soft. Bowels have not been acted on since the operation.

Ordered an egg for breakfast; mutton chop or beefsteak for dinner. Wine and quinine mixture as before.

Vespere.—Relished her breakfast and dinner; tongue moist, and much less coated than it has yet been. As the knee is a little tumid, and, on pressure, rather painful, the external dressings were removed; this appeared to afford instant relief.

Water dressing, etc., to be continued.

22nd, Mane.—Night has been a tolerably good one; pulse under 100; countenance cheerful; bowels have been acted on for the first time; evacuation natural. All the dressings were this morning removed; the edges of the wounds assume altogether a healthy appearance, though the parts immediately connected with the stitches are slightly inflamed; the threads were removed, and the aspect of the knee is as favourable as can well be expected. A portion of the inside lateral incision seems inclined to unite by first intention; also much of the transverse incision. There was a considerable sanious discharge, principally from the external wound; some flowed spontaneously and more escaped when the parts were pressed on. Adhesive straps were applied, and the many-tailed bandage. This dressing occasioned very little pain.

Water dressing as before; diet of the same nutritious nature. A bottle of porter to be taken daily in conjunction with the wine and quinine.

23rd.—The night has been a more comfortable one than she recollects having had for the last two or three years; pulse 96, regular, and of moderate strength; skin cool; tongue perfectly clean and moist; appetite not very great, but relishes all her meals. Only external dressings removed; much the same kind of discharge from wounds as yesterday.

The same treatment to be continued.

24th.—Complains of pain in the face and head; states that she has often experienced this before; it is evidently neuralgic. In consequence of this, her night has been but a very indifferent one. The knee, pulse, and tongue the same as yesterday; bowels confined.

A tablespoonful of castor-oil to be taken, and, after its action, the same plan as heretofore to be continued.

25th.—Bowels were moderately acted on twice yesterday. Night has been much more comfortable than the preceding one; wounds have discharged a great deal; the edges have, however, a healthy appearance; several parts have, in a great measure, healed by first intention; the knee is much less tumid, though still painful and tender on pressure.

Continue the same.

26th.—The discharge, though still very copious, is of a more healthy character; pulse 92; patient expresses herself as comfortable.

Water dressings as usual; diet, etc., as before.

27th.—The same as yesterday.

No alteration in diet or medicine.

28th.—The entire dressings removed this morning; suppuration abundant; complains of but very little pain in the knee, but very much in the lumbar region, which she compares to that which she experiences when the catamenia is on the point of appearing.

Treatment the same.

29th.—About an hour after the morning visit yesterday, the catamenia appeared, and has continued in greater abundance than usual. Pain in the back still severe, but not more so than on similar occasions. Pulse 100; feels weak; tongue moist and clean; knee as yesterday.

30th.—The uterine discharge continues, but less in quantity; feels comfortable; bowels acted late last evening.

Continue the same.

31st.—Has had much sleep during the night. Catamenia has nearly ceased. Pulse 90; extremely regular. The discharge from knee still very copious; a great deal of laudable pus is, however, mixed with the sanious discharge.

Water dressing, quinine, and diet as usual.

Feb. 28.—To have continued a daily account of this case from the last report to the present time would have been a tedious recapitulation of almost the same appearances and symptoms, together with the same treatment as have been already noticed. For the first eleven days after the operation, there was not a single unfavourable symptom, not one to cause the least uneasiness for the patient's life; and since that time she has progressed satisfactorily—perfectly so, as far as her health is concerned, for it is now considerably better than it had been for many months, and favourably also as regards the appearance of the knee: the tumefaction naturally resulting from an operation of this nature has considerably subsided; there exists scarcely any œdema of the leg; and, although the discharge is considerable, and evidently from sinuses both above and below the parts once forming the knee joint, still it is of a healthy character. Pressure on the parts can now be borne with much less pain than formerly. The appetite has also improved. The bowels are constipated, (as they have generally been;) care, however, has been taken that they should be relieved every second or third day. The renal secretion continues natural.

The same dressings to be continued, and also the same nutritious diet. Quinine and port wine as usual.

March 20.—Felt feverish during the night, and experienced several rigors. Complains of throbbing pains rather better than midway down the thigh. Two openings in the fore part of the knee have been closed for the last few days, and the pain complained of evidently arises from pent-up discharge; in other respects everything is going on favourably; pulse is rather accelerated—90 (till now it has ranged from 76 to 84); some thirst; tongue clean, countenance cheerful; bowels as usual.

Porter and quinine to be omitted; saline aperient to be taken immediately, and the hot-water dressing with oil silk, etc., to be applied over the fore part of the thigh and transverse incision of the knee.

21st.—Feels comfortable this morning, and slept tolerably well the latter part of the night. The aperient acted twice. Pulse 80. A considerable quantity of healthy pus has made its exit through the former openings. Tenderness of the thigh has almost altogether subsided. Has for the last week complained occasionally of pain in the back, arising most probably from the catamenia not having appeared.

Hot water dressing to be continued. Wine and porter as before. The Quinine to be omitted, and ʒj of mist. ferri. com. to be taken twice a day.

31st.—Health continues to improve; appetite very good. There is much less discharge from the knee; nights are very good; catamenia has not yet appeared.

Diet as usual; medicine also.

April 10th.—The catamenia came on yesterday. The appearance of the knee continues favourable; feels weak; pulse is, however, good, and everything connected with the digestive organs healthy.

Omit medicine. Food of the most nutritious kind to be continued.

30th.—The leg was taken out of the box to-day, and gutta percha splints, moulded to the shape of the knee, applied. The wounds have all healed with the exception of one place about the size of a sixpenny piece, situated at the upper part of the inner lateral incision; from this there still continues a discharge, but by no means considerable. Complete bony union has not taken place, as there exists some degree of flexion and extension; she can, however, without any other assistance than that given by the splints, raise the whole limb, and keep it raised for some time. Her health has wonderfully improved.

May 15.—Has been down into the open air every day since the last report, and finds herself stronger than she has been for two or three years past. The small wound has not healed, but looks healthy; with the assistance of one crutch and a high-heeled shoe she is able to walk very tolerably.

24th.—Was able to walk across the room without any assistance, and, notwithstanding my persuasions to the contrary, at the instigation of her husband she left the hospital. On July 17 she was re-admitted. During her absence she had had many hardships to contend with; the ill-usage of a drinking husband, the sole care of a family, and scanty provisions; which, together with neglect of dressing the knee, and the being obliged to move about at every hour of the day, necessarily produced considerable mischief; so that, instead of the small healthy wound which existed when she left the hospital, and which, had she remained there, would, I feel convinced, have disappeared within a month, I had now the mortification of finding several small sores communicating with sinuses, and a considerable discharge flowing from them. Perfect rest was again enjoined, and this, together with nourishing food and malt liquor, gives me every hope that her imprudent step will have no worse result than that of retarding the cure. The knee, at present, is almost entirely healed, and again (with the assistance of a very ingenious frame made by a gunsmith of this place) she is able to walk with a stick; and I confidently expect that ere long she will do so without this adventitious help. She has not a single ailment, and is much stouter than she has ever been before.

[To be continued.]

REMARKS ON THE MICROSCOPIC CHARACTERS OF THE URINE IN BRIGHT'S DISEASE OF THE KIDNEY.

By JOHN D. MACDONALD, Esq., R.N.

Having studied, from time to time, the microscopic characters of the urine in Bright's disease of the kidney, and compared the appearances there presented with those of a section, or torn-up portion of the diseased gland itself, when the occasion offered, several objects of interest were frequently to be observed, either little known or not at all described; and, as they illustrate and support the pathological views of the malady in question, so ably put forward by Dr. George Johnson, they may be worthy of notice.

The presence of lymph or pus is supposed to afford the only unequivocal evidence of inflammatory action, and this seems to be borne out in renal disease. Mechanical obstruction and passive congestion are the first effects of excessive distension of the uriniferous tubules, by whatever cause induced, and in the great majority of cases the antecedents of any active state which the vessels may take on. The condition of the kidney in these respects will be clearly indicated by the presence or absence of fibrinous casts of the tubules in the urine; but this part of the subject must be dismissed, as the remarks about to be offered chiefly refer to certain changes which are incident to the secreting cells of the kidney.

Admitting the faithfulness of the exposition given by Mr. Bowman of the minute anatomy of the kidney, as demonstrable at any moment, a vindication of it may be called for, the pathology of the granular kidney seems to be simply this—an error of secretion, depending most probably upon the faulty character of the plasma from which it is derived, is attended with a gradually increasing deposition of oily matter within the cells, which are the principal agents in the process. This circumstance gives rise to an over-distension of the tubules, (more especially between the meshes of the matrix, where there is least resistance,) and thus, by mechanical pressure, the return of blood through the venous plexus which surrounds them is obstructed, the Malpighian tufts become congested, and may be ultimately ruptured; so that the presence of albumen in one instance, and actual blood in the other, may be detected in the urine. In some cases, the hæmorrhage which occurs in this way is truly alarming, and the more immediate cause of a fatal issue. Notwithstanding the close analogies existing between the liver and kidney with respect to structure, function, and the diseases to which they are subject, there is this much to be said, that the kidney does not admit of congestion with impunity, while the liver may be gorged to a considerable extent, and yet suffer comparatively little disorder of function. There may be often some difficulty in determining the fatty nature of the contents of the epithelial cells of the kidney when discharged with the urine, more especially if little is understood about the changes which they are liable to undergo, in obedience to common laws. The most usual metamorphoses of these cells exhibit eight phases. In the first, distinct oil globules are to be seen within them, varying in number and size, and giving a more or less rounded figure to the cells themselves, which become enlarged in a proportionate degree. 2ndly. The oil globules may run together, and so completely fill the cells, that (with the exception of the nuclei, which are generally visible) they appear like starch granules or little masses of oil, refracting the light powerfully. 3rdly. The fat gradually assumes a more concrete form, loses much of its brilliancy, and presents a mealy surface, any remaining globules becoming angular and irregular in form. 4thly. This concrete mass accumulates around the nucleus, and a clear space begins to appear between it and the cell-wall on the opposite side, which may be partly due to the imbibition of water. 5thly. An analytical change takes place in the fatty matter which separates into its two constituents, the more fluid part exuding through the cell-wall, while the more solid presents a crescentic appearance, the nucleus occupying its centre. 6thly. The cell itself breaks down at its weakest part, and the crescentic mass exhibits a well-defined convex border, formed by the remaining portion of the cell, and an uneven concavity where the cell is defective and the concrete fat is exposed. 7thly. The little crescent continues to extend itself, the outline becomes better defined, and a fusiform figure is ultimately assumed, the nucleus still occupying the centre of the mass, having undergone no apparent change; and 8thly. The pointed extremities of this little fusiform body are drawn out into filamentous processes, so that when several of these altered epithelial particles unite end to end, as often happens, one is reminded of the mode of development of the white fibrous tissue; and on the whole they present such a close resemblance to cancer cells, that the history of their formation is of some importance to be borne in mind with reference to diagnosis, especially if blood globules be also present with them; for it has been asserted, that if fusiform cells and blood discs are found to co-exist in the urine, certain indication is afforded of cancerous disease, affecting either the kidney or the bladder.

Now, many persons, keeping this doctrine in view, may arrive at once at a conclusion, without waiting to draw the distinction between an actual cell and a cell-like body. Forms very similar to those above described abound in the spleen, with blood discs seemingly as nuclei, and differing altogether from the muscular fibre cells (so called) of the trabecular sheaths.

Royal Naval Hospital, Plymouth.

MEDICAL HISTORY OF THE 47TH REGIMENT.

By GEORGE SAUNDERS, Esq.
Assistant-Surgeon, 47th Regiment.

FEVERS.

There is perhaps no disease upon which so much has been written with comparative perplexity to the student and inexperienced practitioner as the subject of fever, clearly exemplifying the paramount importance of clinical instruction, and nothing short of the bedside, where alone can be acquired knowledge at once valuable—where alone the mind can receive a correct impression of those symptoms characteristic of functional or organic changes, that mark the various stages of departure from health.

Referring to the return of sick of the head quarters, from the 1st of April, 1842, to the 11th of February, 1843, when stationed at Berbice, it appears that 342 cases of intermittent, and 112 cases of remittent fever, were received into hospital during that period; in fact, scarcely a man of the regiment at that station or at Antigua escaped an attack of ague; and repeated attacks in the same individual were not of unfrequent occurrence,—a circumstance that can hardly be guarded against in malarious districts, where the disease is endemic.

The remittent type was generally more formidable than the intermittent; shivering, great pain in the loins and thighs, with general pyrexia, were speedily followed by intense headache and bilious vomiting.

One great object in the treatment, was to effect free and copious evacuations from the alimentary canal, with a moderate action of the skin; and when this was accomplished within the first thirty-six or forty-eight hours of the attack, the most favourable symptoms invariably ensued.

Mercurial purgatives were indicated early in the disease, on account of the derangement of the biliary system; and calomel, being tasteless, and less likely to be rejected by an irritable stomach, was administered in ten or fifteen grain doses, followed by a saline purgative. Just after the recurrence of each paroxysm, ten grains of the sulphate of quina were exhibited with the most remarkable benefit.

A mixture, composed of carbonate of soda and nitrate of potash proved useful in allaying thirst, restraining nausea, etc. Flushing of the face, with suffusion of the conjunctival vessels, and intense frontal pain, were relieved by the abstraction of a small quantity of blood from the temples.

Shortly after the arrival of the regiment in England, in 1841, several cases of intermittent fever revealed themselves, but were exclusively seen in men who had suffered from the same disease in the West Indies. One case particularly deserves to be mentioned, known in aguish countries as *dumb ague*, in which there was great tendency to congestion of the internal organs.

"Common continued fever" is a term under which a large proportion of the sick in the army is comprehended, from the difficulty, no doubt, most commonly experienced in discerning *à priori* a legitimate case of this species of fever from symptoms that are concomitant with the effects of ordinary dyspepsia resulting from indulgence in the use of intoxicating liquors, etc., which usually subside in the course of a few days without the interference of remedial measures. This, to some, may appear strange, but nevertheless it is a fact worthy of observation.

In robust habits, emetics, cathartics, and antimonials, are generally efficient remedies in the early treatment of continued fever; but in tropical climates their employment requires much discrimination. purgatives alone being preferred to medicines which are known to produce a very irritable state of the stomach.

The yellow fever made its appearance among the troops at Barbadoes in November, 1812, where the head quarters of the regiment were at the time stationed. The first cases that appeared were in persons in hospital under treatment for other diseases.

Only two decided cases occurred in the regiment, both of which proved fatal, though several others manifested themselves with the symptoms of the disease at its commencement, but which were fortunately checked in their progress. Almost every individual who was so affected, either was, or had been within two days previously, a patient in hospital.

The only atmospheric peculiarities which were unusual, either previous to, or during the prevalence of the disease, were the following:—In the end of September a very heavy fall of rain took place, and a considerable body of water collected on the low ground immediately to windward of the hospital; during October, this was gradually, but not completely, dissipated; towards the end of that month, another considerable fall of rain occurred, with the effect of increasing the collection of water. During October the weather was close and cloudy, and the wind slight; this was followed, in November, by clear weather, with a hot, scorching sun. At the time the fever showed itself, the low ground, noticed above, was quite moist, and had in its centre a large pool of a few inches deep, and at one side another of more considerable depth.

The night on which the first individual was attacked, he had imprudently opened the jalousies of a window at one side of his cot, and the patient in the cot next him, on the opposite side of the same window, was seized with febrile symptoms that night also, but recovered. Several others became affected about the same time. The moment, however, the first case unequivocally assumed the character of yellow fever, the shutters of all the windows on the windward side of the hospital were carefully closed every evening about sunset, and the disease made no further progress in the hospital.

The first death from febris icterodes took place on the 6th November, in a debilitated subject, who had for months been a sufferer from secondary syphilis; the other happened on the 18th of the following month, in a robust young man, who was admitted into hospital a few days previously on account of severe catarrh. In each case, death was within a few hours preceded by yellowness of skin, black vomit, and great oppression and tenderness of epigastrium.

In both cases, mercurial and saline purgatives were freely administered at the commencement, and followed up by strong purgative enemata, hot turpentine applications to the epigastrium and legs, and blisters between the shoulders, but with scarcely even a temporary alleviation of the symptoms.

On dissection, a large quantity of turbid fluid was found effused between the arachnoid and pia mater, and in the ventricles; considerable congestion of lungs and liver; the stomach in both, and the duodenum in one, contained black vomit.

Yellow fever is, under any circumstance, a disease of extensive severity, and it is apprehended will always be productive of great mortality.

Between the years 1830 and 1850, thirty-six cases of typhus fever have been recorded, of which nine were deaths. It is remarkable, that only two cases of this character of fever occurred in the regiment while stationed in England, and that the remaining thirty-four cases occurred during the period of its service in Ireland.

During the summer months of 1847, the 47th and 67th regiments occupied Cork Barracks. The fever epidemic of that year, which caused such fearful devastations in Ireland, made sad havoc among the men of the 67th regiment. Those attacked were chiefly recruits undergoing drill-instruction,—men who had, a very short time previously, entered the ranks in a half-famished state verging on disease, having been compelled to quit their homes, where the lowest condition of want and wretchedness existed,—to obtain the food, raiment, and shelter provided for the British soldier. The sudden change from a life of listless inactivity, destitution, and freedom, to habits of comparative exertion, discipline, and restraint, though under circumstances of plenty, may at times, and in exposed situations especially, be pronounced injurious, in rendering enfeebled constitutions very susceptible of epidemic disease.

The principal features of the epidemic were great prostration of strength, despondency, feeble and frequent pulsation of the arteries, congestion of the internal organs, delirium, with maculæ over the body and extremities.

The 47th regiment, at this period, was principally composed of well-seasoned men; and of the small proportion of recruits, very few were so young in the service as those of the 67th regiment; nevertheless, eleven of the men were attacked, of whom three died.

ERUPTIVE FEVERS.

Cases of variola and rubeola occasionally present themselves among the men, women, or children of a regiment,

which must always claim the early and prompt attention of the medical officer, in order that he may, with as little delay as possible, recommend the adoption of those measures likely to prove efficacious in preventing the extension of such formidable diseases.

In 1845, eight men of the regiment were afflicted with small-pox. On the 8th regiment leaving Chester Castle for Weedon, a man with confluent small-pox was left behind in hospital, and a soldier of the 47th regiment, who had had small-pox, was appointed to attend on this patient; and he incautiously, and contrary to his orders, went into the barracks,—and thus it was believed that a young recruit contracted the disease, and also a child of about six weeks old, that lived in the same room, and was never vaccinated. A woman who washed for this recruit was soon after seized with modified small-pox. All these cases were immediately separated from the other persons in barracks, and other precautionary steps taken. Variola prevailed, at this period, to a considerable extent in the town of Chester.

Waterford.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

By LIONEL S. BEALE, M.B.,

Medical Associate to King's College, and late House Physician to the Hospital.

CASE OF ELEPHANTIASIS GRÆCORUM, WITH ANALYSES OF THE URINE.

Under the care of Dr. Todd.

Abdullah Jacob, aged 13, of Jewish parents, and born in Calcutta. He left that place about two years since, and during this time he has lived at Bethnal-green. He is of dark complexion, with coarse black hair, and dark brown eyes. He enjoyed pretty good health before he became affected with his present malady, and he has usually lived well. He was admitted into King's College Hospital on October 4, 1850, and at that time his condition was as follows:—The face was covered with soft, flattened, and glossy tubercles, some of which had coalesced, and others were found to contain a little fluid; they varied in size from that of a millet seed to that of a small marble; the skin around the tubercles appeared hard and wrinkled; the nose was flattened, and the alæ round and prominent; the skin of the ears was affected with one or two tubercles, but it was not extensively diseased in this situation; the sensibility of the skin was found to be unimpaired. There were one or two tubercles on the eyelids, but the conjunctivæ were not in any way affected; the eyebrows were nearly destitute of hair. The scalp appeared to be quite free from disease, and the hair had not fallen off. Upon examining the roof of the mouth, a few small ulcerations were detected; the voice was feeble and hoarse. The arms presented numerous cicatrices of a dirty brown colour, which appeared to have resulted from the healing of large ulcers. The inguinal glands of both sides, situated immediately below Poupart's ligament, were enlarged, and the patient said they were sometimes very painful. There were several ulcers on the left leg, most of which appeared to be healing, but some still continued to discharge a thick fluid, resembling pus. The skin of the legs showed a great tendency to form scales, but no such disposition was manifested by the skin of the knees or elbows. The tubercles on the face appeared to be advancing, while the sores on the leg seemed to be healing by granulation, which had already occurred in the arms, and numerous cicatrices remained. The outside of the limbs was not more affected than the inside. The testes were small, and tender upon pressure. The mind did not appear to be in any way impaired. The patient slept soundly and did not complain of headache; his pulse was 120; the skin was hot and dry; tongue moist, slightly furred in the centre; appetite bad, with occasional sickness; bowels regular, but the motions were offensive and light-coloured: urine abundant, clear, and light-coloured, sp. gr. 1025.

The only history we could obtain was that which the boy himself gave, and was unfortunately very imperfect. Two or three months after his arrival in England, he tells us that he first noticed some sores on his legs, which appeared to arise spontaneously, and gradually became worse, in spite of sea-bathing and medical treatment to which he was subjected. His parents, he says, were both perfectly healthy, and had never suffered from a similar malady, and, as far as can be learned from the boy, there does not appear to be any history of syphilis. All the boy's friends are in Calcutta, so that we were unable to obtain any additional history. The skin of the face was of a peculiar tawny colour, to which in part is due that characteristic bestial appearance of the countenance, so strikingly represented in Dr. Willan's well-known plate.

The condition of the skin of the face presented a marked contrast with that of the integuments of the extremities in many important particulars. There were a number of true tubercles on the face, which, when pinched between the fingers, were found to extend deeply into the cutis and cellular tissue beneath. The skin on their surface was smooth and shining, presenting here and there on the convexity of the tubercle a few very superficial and irregular furrows. The tubercles varied much in size, and in many situations, particularly about the alæ of the nose, several appeared to have coalesced, which gave a broad, flattened appearance to this part of the face. Here and there, towards the summit of some of the tubercles, a slight dry scab might be observed, marking the spot from which a small collection of matter had been discharged. These openings, however, very rapidly healed, and there seemed no disposition to the formation of ulcers.

The eruption on the arms had disappeared before his admission to the hospital, and all that now remained were several pale brown cicatrices. On the legs were several unhealthy-looking ulcers, varying in size from a pea to that of a shilling; the edges of these ulcers were ragged, and, in some instances, rather everted. From the surface, a pale and very fetid discharge was secreted, which was now and then streaked with blood. The ulcerating surface was pale, and what few granulations appeared from time to time were soft, and seemed to be possessed of but very slight vascularity. The discharge from the raw surfaces soon became dry, and formed very thick and hard scabs, of a dark-brown colour; and, as the secretion continued at the base of the scab, this latter was by degrees raised, and at last took the form of a flattened pyramid, and presented much the characters of the scabs in rupia.

The skin of the trunk appeared quite healthy. The sound skin between the tubercles and cicatrices was very soft, and, when pinched up in folds, was found to be exceedingly thin and supple.

The treatment which he was first put upon, consisted of small doses of the bichloride of mercury; a drachm of the solution was given three times a day; but, about a week after the commencement of this plan, Dr. Todd ordered him to take three grains of the compound calomel pill three times a day, instead of the bichloride. This treatment was persevered in for a month, when he was put upon ten minims of the liquor cinchonæ three times a day. No great improvement having resulted from this plan of treatment, he was ordered on October 2nd to take a drachm of cod-liver oil three times a day, and all other medicine was discontinued. On November 8th, some of the tubercles appeared much less prominent; but about this time diarrhœa (which occasionally troubled him at intervals during his stay in the hospital) appeared, and was accompanied with vomiting of a bilious-looking matter. The vomiting soon passed off, and for the next three weeks he appeared somewhat better; but, towards the beginning of December, the face swelled considerably, and partook rather of an erysipelatous appearance; at the same time the diarrhœa again came on, and he appeared to be losing flesh rapidly. The purging was checked by the administration of decoction of logwood, and the inflammation about the face abated; but, at the same time, several fresh tubercles on the face had ulcerated, and were now discharging a thin, watery-looking pus. About this time, another symptom appeared, of which he had not previously complained. Considerable pain was caused upon pressing firmly on the shin bones. The pain, from his description, seemed to be of a similar nature to that met with in cases of syphilitic periostitis, but, in the present case, no nodes or any unevenness of the surface of the tibia could be detected. The emaciation appeared to be increasing, and the patient was evidently becoming very weak. On Dec. 12th he was ordered to take ten minims of liquor cinchonæ, with half an ounce of the infusion of krameria. The legs still continued very painful, and pain of a similar character now affected the pelvic bones. At this period his distress was increased by the occurrence of a troublesome cough; his pulse was 120, and very weak; and the tubercles on the face still continued to discharge. The ulcers on the legs were evidently increasing both in size and number, and from them a very acrid and highly offensive secretion was poured out, which rapidly dried, and, in the course of a short time, a large rupious-looking scab was formed, in consequence of the secretion still going on from the surface of the ulcer as fast as the scab increased in bulk by the addition of successive layers to its base. When the scabs had obtained a considerable size, they dropped off, or were inevitably removed when he was washed. The ulcers appeared to have increased in diameter as each scab became detached; they were, for the most part, oval in form, and varied in

size from a fourpenny piece to that of half a-crown ; the surface was almost smooth, and of a pale fawn colour, interspersed here and there with a few bleeding points. A few unhealthy granulations occasionally made their appearance ; but not the slightest contraction of the sore, or other tendency to heal, was at any time exhibited by the ulcers on the legs, which, it may be remarked, in this point materially differed from those on the face, for these latter manifested a remarkable tendency to heal ; and, although several tubercles ulcerated in succession, and often many in the same spot, no tendency was manifested in the ulcerations to run together, nor was the wound in the skin larger than just sufficient to allow of the escape of a small collection of pus which had formed in the upper part of the tubercle, and it was noticed that in each case the wound was found to heal immediately after the escape of the contents of the abscess. From the time of his admission up to the period of his death, the tubercles on the face and the ulcers on the legs continued to exhibit their characteristic course, and at no time could any common character be noticed to exist in the affection of the face and that of the legs, by the presence of which any similarity in their nature or origin could be presumed to exist. The tubercles on the face appeared to follow one particular course, and exhibited a remarkable tendency to heal, while the ulcers on the legs, from their first appearance, exhibited a tendency to spread, and continued to secrete from their surface an unhealthy, acrid, and offensive fluid. The affection of the face alone marked the tubercular form of the eruption; and whether the ulcers on the legs were originally developed by the suppuration of small tubercles could not with absolute certainty be determined ; but if this was the manner in which they really originated, the tubercles must have been so small as entirely to have eluded the most careful observation, and they certainly could have possessed no resemblance whatever to those developed upon the face, besides which, the eruption on the legs appeared to manifest a tendency diametrically opposed to that exhibited by the tubercles on the face; for while in the former the destructive process seemed in the ascendant, the reparative certainly predominated in the latter.

On the 31st of December Dr. Todd put him upon compound decoction of sarsaparilla in doses of half an ounce three times a-day, and under this remedy, for a time at least, his symptoms continued gradually to improve, the appetite became better, the ulcers ceased to discharge, and his general nutrition much improved ; but about a fortnight after he commenced the sarsaparilla it was found necessary to discontinue it, in consequence of the return of the diarrhœa, which was checked for a time by tincture of rhatany, and starch and laudanum injections. The sarsaparilla was resumed for a week, but in consequence of the purging again appearing it was discontinued. From this time (January 30th) little alteration was exhibited in the course of the disease up to the time of his death. The eruption on the face underwent no marked change, the tubercles being slowly developed, and discharging a little pus from an opening in their summit, which soon healed. The ulcers on the legs still continued to increase in size, and exhibited the same unhealthy appearance which they had manifested for many months. The discharge from their surface became more offensive, and rather increased in quantity. The emaciation became extreme, and the great tenderness of the skin of the whole body during the last few weeks of his life much increased his sufferings. Early in April the diarrhœa again became the most urgent symptom, and continued to the time of his death, which occurred on April the 8th.

I made several careful examinations of the urine in this case, but was unable to discover any marked deviation from healthy urine, except in the occasional presence of oxalate of lime. There was a total absence of chloride of sodium in the ash of the specimens of urine which I analysed, but I have met with a complete absence of this salt in many other conditions.

On December 15th the specific gravity was 1019 ; the urine had an acid re-action, was clear, and rather high coloured, but contained no deposit. On February 16 it was 1020, acid, and contained a slight deposit, consisting of lithate of ammonia and a little epithelium. The urine of March 6 was 1015, acid, and quite clear ; it contained a few minute crystals of oxalate of lime. On March 17 it was 1013, and the phosphates were precipitated from it by heat. On March 19 it presented the same characters. The urine of March 16 contained—

Water	960·00
Solid matter	40·00
Fixed salts	4·51

The salts were composed chiefly of sulphates, with a small quantity of phosphates and chlorides.

On April 9 the urine was clear, rather high coloured, of an acid re-action, and of specific gravity 1014. In 1000 parts I found,—

Water	965·10	
Solid matter	34·90	100·00
Urea	13·97	40·02
Extractives	16·06	46·01
Lithic acid	·31	·88
Earthy phosphate	·49	1·40
Soluble fixed salts	4·07	11·66
	34·90	

The fixed soluble salts (4·07 grs.) contained, of

Sulphuric acid	·422
Phosphoric acid	1·389

Not a trace of chloride of sodium or other soluble chloride could be detected.

Post-mortem.—The emaciation was extreme, so that in the limbs the exact form of the bones could be distinctly traced through the integuments. Several large unhealthy ulcers were irregularly scattered over both the legs, the skin at their margin being thin and soft, and it did not exhibit, in any instance, the least signs of induration. The skin between these ulcers, which appeared to be sound, had very little cohesive power, and was unusually thin, so that a very slight manipulation sufficed to destroy its continuity. The skin over the knees, elbows, and other prominent parts of the extremities, had been completely rubbed off in cleaning the body prior to the examination. The subcutaneous areolar tissue was of a dark yellow colour, owing to the presence of a very thin layer of fat.

The posterior surface of the right lung was covered with a layer of lymph of considerable thickness ; the remaining parts of the organ were also covered with a thin layer of a similar character. Several miliary tubercles were found in the right lung, and some atheromatous deposit was present in the lung of the opposite side. The heart appeared healthy. The appendices epiploicæ presented a very remarkable character ; to the unaided eye they appeared not unlike a large cluster of cysticerci, or a number of pedunculated hydatids, such as are sometimes met with, under this name, in certain morbid conditions of the chorion ; but, upon microscopical examination, the rounded form and cyst-like appearance were found to be due simply to the complete absence of fat, and to the presence of a quantity of fluid distending the areolar tissue of which they consisted, causing them to assume this peculiar form and appearance. The peritonæum contained a few scattered tubercles dispersed over its surface, and also occupying its subserous tissue. The spleen was rather large, very soft, and easily broken down, containing a great many tubercles scattered throughout its substance. The brain was very pale on its surface, and the ventricles were considerably distended with fluid. There was an almost total absence of fat, except immediately beneath the skin, and the muscles of the whole body were very much wasted.

Exeter Dispensary.—At the annual meeting of the governors of this Institution, held lately, the Report showed, that, on the 31st December, 1850, a balance was owing to the treasurer of 122*l.* 19s. 11d. ; paid for medicines, etc., 327*l.* 7s. 1d. ; taxes and insurance, 26*l.* 16s. 10d. ; repairs, furniture, utensils, etc., 40*l.* 12s. ; printing, advertising, and stationery, 28*l.* 9s. ; salaries and incidentals, 176*l.* 2s. 8d. ; amount in the Devon and Exeter Savings'-bank, December 31st, 1851, 353*l.* 2s. 4d. : total, 1086*l.* 13s. On the credit side—amount in the bank, 31st December, 1850, 342*l.* 16s. 9d. ; subscriptions received, 566*l.* 11s. 6d. ; donations, 8*l.* 8s. 6d. ; interest, 51*l.* 5s. 3d. ; balance due to treasurer, 117*l.* 11s. : total, 1086*l.* 13s. There had not been any legacies received during the year. The total number of cases under treatment during the year was 2722; of these, there were cured 1153 ; benefited, 1295 ; not benefited, 12; discharged for irregularity, 2 ; died, 51 ; remaining, 209. The total number of patients admitted since the opening of the institution was 53,072, and there had been an increase of 102 during the past year on the number admitted during 1850. Mr. Hooper gave a donation of 25*l.* to improve the furniture of the library. The Chairman stated, that, comparing the year 1852 (qy. 1851) with 1848, there had been an increase of 151 patients, and an increase of expense of only 16s. 1d. ; comparing 1851 with 1849, the increase of patients was 284 ; the decrease of expenditure 75*l.* 17s. 11d. Comparing 1851 with 1850, the increase of patients was 102, the decrease of expenditure 53*l.* 13s. 6d. So that, while the number of patients had increased in two years by 386, the cost of drugs, etc., had decreased in the same time by 129*l.* 11s. 5d. Thanks were voted to all the officers, paid and unpaid, and the meeting separated.

SCIENTIFIC LECTURES.

HUNTERIAN LECTURES ON THE ANATOMYOF INVERTEBRATE ANIMALS.

BY RICHARD OWEN, F.R.S.,
Hunterian Professor to the College.

LECTURES I. and II. *(delivered.)*

THIS DAY, MARCH 20.—Lecture III.—*Rotifera.*—Hypothesis of spontaneous generation considered in its application to Infusoria Schulze's experiment. Successive appearance of Infusoria of progressively higher grade of structure in the same infusions. Characters of the Rotifera; their integument, shell, ciliated lobes or "wheels," muscular system, nervous system; their modes of locomotion and of obtaining food; their mouth, jaws, and teeth, stomach, intestine, salivary and biliary glands; vascular and respiratory systems; secretions. Dioecious Rotifera; characters of the male, inferior in size and complexity to the female. Androgynous individuals of Lacinularia. Ovarium, oviduct and cloaca: different kinds of eggs produced by the same female. Final purpose of the "winter-eggs." Unequal cleavage of yolk in the formation of the germ-mass. Development of *Hydatina senta*, and its rate of propagation. Tenacity of life of the Infusoria. Experiments of Leeuwenhoek, Fontana, and Spallanzani, on the revival of Rotifers.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, March 20.—MEDICAL SOCIETY OF LONDON. *Subject:*—Mr. BARLOW, "On Fatty Degeneration of the Heart and Brain." Eight o'Clock.

—— —— ROYAL INSTITUTION. *Subject:* — Professor BRANDE, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Monday, March 22.—ROYAL INSTITUTION. *Subject:*—C. B. MANSFIELD, Esq., "On the Chemistry of the Metals." Four o'Clock

Tuesday, March 23.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY. Half-past Eight o'Clock.

—— —— ROYAL INSTITUTION. *Subject:* — Professor T. WHARTON JONES, "On Animal Physiology." Three o'Clock.

Wednesday, March 24.—ROYAL INSTITUTION. *Subject:*—C. B. MANSFIELD, Esq., "On the Chemistry of the Metals." Four o'Clock.

—— —— GEOLOGICAL SOCIETY. *Subjects:* — 1 W. E. LOGAN, Esq., "On the Foot-tracks in the Potsdam Sandstone of Lower Canada." 2. Professor OWEN, "Description of the Potsdam Sandstone Foot-tracks." Half-past Eight o'Clock.

Thursday, March 25.—MEDICAL SOCIETY OF LONDON. *Subject:*—Lettsomian Lecture, by Mr. HANCOCK. Half-past Eight o'Clock.

—— —— ROYAL INSTITUTION. *Subject:*—Rev. J. BARLOW, M.A., Sec. R.I., "On the Physical Principles of the Steam-Engine." Three o'Clock.

Friday, March 26.—ROYAL INSTITUTION. *Subject:* — Professor COWPER, "On the Principles of the Construction and Security of Locks." Half-past Eight o'Clock.

Saturday, March 27.—MEDICAL SOCIETY OF LONDON. *Subject:*—Mr. LEONARD, "On Perforating Ulcers of the Stomach." Eight o'Clock.

—— —— ROYAL INSTITUTION. *Subject:* — Professor BRANDE, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Medical Times & Gazette.

SATURDAY, MARCH 20.

DEATH BY CHLOROFORM.

THOMAS HAYWARD, aged 23, was admitted into St. Bartholomew's Hospital, on Thursday, the 29th of last January, under the charge of Mr. Lloyd. He had at that time an aneurism by anastomosis, occupying the whole of the right ear, and also to a considerable extent the soft parts in front and behind that organ. On and behind the ear it was elevated so as to form a large tumour. The integuments of the ear were of a deep purple colour, and the rest of the diseased mass participated in the same hue. In every part there was strong pulsation, as well as a loud aneurismal murmur. The temperature was much the same as that of the surrounding parts. Projecting from the meatus there was a polypus or large fungus, whence issued a copious purulent discharge, which was often tinged with blood. There was frequent pain in the right side of the head, but seldom in the diseased structure.

The disease was first observed when the patient was four years old. Various means had been employed at different times to cure it, but without benefit. He had been, he stated, for a long period, in one of the principal London hospitals, where setons were introduced into different parts of the tumour, and portions of it enclosed with silver wires, which were every now and then twisted, so as to tighten them, but without effecting any permanent good; and at length he was discharged as incurable.

Mr. Lloyd not deeming the case hopeless, and having consulted with his colleagues, determined to attempt the cure, first, by deligation of the principal arterial branches in direct communication with the diseased mass, and afterwards by pressure applied to different parts in succession.

With this view, on the 14th ult., the patient was placed under chloroform, and, with the assistance of Messrs. Wormald and Paget, Mr. Lloyd placed a ligature around the temporal artery just as it passes over the zygoma, and other ligatures were applied in such situations as was considered would tend most to cut off the supply of blood from the part affected. Pressure was afterwards applied to the parts before and behind the ear. The operation lasted, as was expected, for a long time, and the patient was kept under the influence of chloroform for half an hour or more. From the effect of this he recovered quickly, and, when visited half an hour afterwards, he was found lying comfortably in his bed; and on being asked how he was, very comfortably and smilingly said, he was very thankful the operation had been performed, and that he hoped it would soon be able to be repeated.

After this everything went on favourably, the tumour became much diminished in size, and the pulsation was also much lessened. But on further examination a large artery was found beating very strongly between the mastoid process and the ramus of the jaw, pressure on which part completely arrested the pulsation throughout the diseased mass. On this, therefore, Mr. Lloyd determined to place a ligature, and appointed the 17th inst. for the purpose.

The patient, consequently, on Wednesday last, was taken into the theatre of the hospital, placed on the operating-table, and chloroform administered as on the former occasion. The chloroform was some of the same, and the apparatus employed for its administration precisely similar. It was administered by one of Mr. Lloyd's dressers, who well understood, and had long had experience in its use. A gentleman of great experience, who had been for years at the hospital, and two years house-surgeon, was watching its effects, and marking the state of the pulse. Other gentlemen were assisting, and also on the look out.

In from five to ten minutes the usual effect was produced, the patient having previously struggled much. The operation was then commenced; but no sooner had Mr. Lloyd cut through the skin, than it was stated that the pulse had suddenly ceased. The chloroform was at once removed; but in a few seconds the patient had ceased to breathe, and no pulsation could be felt in any of the arteries or at the heart.

Artificial respiration, as well as percussion and compression of the different parts of the body, were immediately employed with energy; and, after continuing the means for a short time, the circulation was observed to be returning, and the act of respiration was several times performed. The

state of inanimation, however, speedily returned, but, by the employment of the same means as before, with the use also of galvanism, the circulation and respiration were again restored. Quickly, however, the patient fell into the same state as at first, but was again restored by the same means.

In a few moments the state of inanimation again occurred, when one of Mr. Lloyd's colleagues coming into the theatre recommended that the external jugular vein, which on the right side was very turgid, should be opened, as well as that tracheotomy should be performed, and the lungs inflated. These means were accordingly had recourse to. The patient was also placed in a warm-bath, at the temperature of 104, artificial respiration being kept up all the time, and friction of the lungs also employed. All, however, was of no avail, and it soon became evident that life was irrecoverably gone. The resuscitating measures were continued for more than an hour. Ammonia had been applied to the nostrils; but no attempt was made to introduce any stimuli into the stomach, as Mr. Lloyd feared any liquid placed in the mouth might pass into the larynx and occasion instant suffocation.

Such is the history of a case we feel it to be our duty thus to lay before the Profession—the only fatal case, be it remembered, that has occurred in the many thousand administrations of chloroform at St. Bartholomew's Hospital. Should permission be obtained for the performance of an examination of the body, we shall lay an account of the condition of the various organs before our readers.

BITTER BEER.

A series of lectures on hygiene, by M. Payen, are in course of delivery at the "Conservatoire des Arts et Métiers" at Paris, and have, we understand, attracted a great deal of attention. In one of these lectures, a statement was made, which appeared subsequently in the pages of the *Constitutionnel*, and was thence copied into the *Union Médicale* of the 6th March. Our information is derived from the latter source; and we are thus particular in giving the reference, as the statement referred to is one of deep importance, and to which we would not give circulation did it not appear to have been made on perfect information.

It is just now the fashion to believe that bitter beer is the best stomachic that was ever invented. What oceans are exported to hot climates, what seas are consumed by dyspeptic ladies and delicate gentlemen in this colder region, surpass belief. The English nation annually consume an Atlantic of beer, and no inconsiderable portion is constituted by the fashionable variety above-named. That the bitterness of the best kinds of "pale ale" is given simply by an excess of hops or chamomile we firmly believe, and that such a beverage is an excellent stomachic cannot be denied; but the fashionable longing for bitterness has surpassed the bitterness of hops, and the manufacturers have apparently been driven to their wits' end to satisfy the dyspeptic cravings of the British stomach.

Under these circumstances, some of them have selected a bitter of whose potency no one can complain; and our friendly neighbours on the other side of the water have most fraternally aided them in their endeavours to satisfy the public. M. Payen states that the French Government have become aware that large quantities of strychnine have been made in Paris, the destination of which was secret. It was discovered, however, to be intended for exportation to England, in order to fabricate bitter beer. The precautions of the French police are so strict, and the penalties for falsifications are so stringent, that this pernicious use of strychnine does not prevail in Paris; but no doubt it was with a feeling of bitter satisfaction that the agents of the police learned that "Perfidious Albion" was to have the full benefit of French ingenuity.

A French invasion (we say it advisedly) is a joke, compared to this onslaught on an Englishman's most sensitive organ. Unable to invade our shores, the French have at least succeeded in attacking our stomachs. Fears they cannot cause; but tremors they will most assuredly produce. Nux vomica is as difficult of digestion as a Minié bullet, and a grain of strychnine would produce more effect than a canister of gunpowder.

We are not informed as to the amount of the trade which has thus been created by the resources of our restless neighbours; but if the falsification has reached to any extent, the consequences may be serious. The quantity of strychnine in a bottle of pale ale might possibly be small; but yet strychnine is a poison of extreme violence, and is, moreover, disposed to accumulate in the system. It does not easily pass out of the body, but remains obstinately impacted in the tissues, and defies for a long time all chemical changes. We can easily conceive, that a small quantity, taken day after day, would at last produce a series of anomalous symptoms, and might, in some cases, give rise to permanent ill-health. To give, however, bitterness to a pint of beer, the quantity of strychnine must be, we should think, as large as a medicinal dose, and if so, it must, in a very short time, and inevitably, give rise to symptoms of poisoning which would probably not be referred to their true source. What makes this fraud the more dangerous, is the difficulty of detecting strychnine in complex solutions. Its discovery requires a long and difficult analysis; and this, probably, is one reason why it has been selected by the perpetrators of this diabolical adulteration.

This is one instance the more of that absurd "*laisser aller*" system which we enjoy under our free Government. Adulterations of all kinds go on, without investigation or hindrance. We question whether a liberal Government, which neglects the most elementary principles of hygiene, may not take a lesson from even a despotism, which has a tender care of the health of its subjects,—nay, some would give up the franchise to keep their stomachs, if it is necessary to surrender our freedom in order to be kept from being poisoned. When will the unfortunate people of this country have a true "Protection Government," which does not think only of the "country party," but also of those unfortunate denizens of great cities, who are stifled with impure air, nauseated with putrid water, and poisoned with manufactured meat and *bitter* beer?

It is of great importance that the honest manufacturers of bitter beer should take up this subject, and should satisfy the public that this atrocious falsification is limited. We are persuaded, that a belief in the universality of this fraud would absolutely destroy the sale of their beer, and would ruin a large and deserving class. For their own sakes, we hope that the true delinquents may be traced out; and we would implore the Government once more not to neglect this subject of the adulteration of food, but to establish at once such a *surveillance* as may render these gigantic frauds impossible.

LOOK AT HOME.

The whole question of the philosophy of moral error, as it has been termed by an able writer, is too comprehensive to be discussed in these pages; yet, although the sources of such error are broadly stated to be twofold—namely, an in-

difference to the attainment of truth, and the bias of men's minds—there are secret operations which lead to erroneous practices among ourselves, and which too often resist our endeavours to trace them to their origin, either because such practices are said to be insignificant in themselves, or because they commit no glaring sin against public decency.

The strong arm of the law is an efficient protection to the public against the dishonesty, neglect, or unskilfulness of the qualified medical practitioner; the dread of the penalties that might be incurred by the verdict of the coroner's court is an equally powerful defence against the proceedings of the notorious quack. But neither Acts of Parliament nor courts of law can protect society from the insidious quackery when at work within the ranks of the Profession itself. The machinery which is intended to root up such weeds must be constructed and directed by ourselves.

It is not our purpose at present to enter into this question, further than to point out certain meannesses, which require but a fair exposure to make all men acknowledge they destroy the claim of those who adopt them to be considered honourable in the highest sense of the word; nor shall we animadvert on those casual mistakes to which all men in all situations of life are liable, through inattention or ignorance; but rather confine ourselves to studied acts of unfair dealing, which, probably, have originated in a fundamental defect of the mind—in such a defect, in short, as disqualifies the possessor from appreciating the higher objects of his calling.

We propose, then, to divide our delinquents into two classes:—the petty offenders against good taste, whose little tricks are either ridiculed or disregarded altogether by the world; and the more formidable violators of professional decorum, whose established good character is supposed to be a sufficient answer to all objectors.

In former days the doctor was called from the service of the church so repeatedly that the fact has passed into a proverb in all congregations? But the rankness of this, we believe, has over-topped its growth; but even now, who is he that driveth furiously on all occasions, as if the multitude could believe that medical men were always in a hurry? Again, remark the *ad captandum* phraseology often adopted to describe the plainest case in practice, of which every word is a theory. Again, the systematic falsehoods of the *pseudo*-stethoscopist and speculum bearer; and then observe the little apparatus at the bedside of *all* patients,—the urinometer, the litmus, nay, even the pocket microscope? Look into the local or Sunday newspapers, and see the direct and indirect advertisements, such as this: "On Wednesday last, Mr. Headlong, our distinguished townsman, performed the operation of cephalotomy, for the relief of that dangerous disease, anthropophagus malignus; it was found necessary to remove the entire cranium," etc. We might multiply instances, but our want of space interferes. We cannot, however, forbear to notice, that even dress may be made an index of the ascetic doctor, (we have no professional costume, *væ nobis!*)—the white and stiff cravat, the sable uniform, the long and sour countenance, the inverted and shuffling feet, the hat! surely if there be such a place as a special limbo of vanity for medical defaulters, the heroes of our first section will find promotion there,—not among the more daring spirits, who defy established institutions and the "right divine" of college or of hospital, much less among those who render a liberal and enlightened allegiance to the authorities of the Profession; but with all whose pitiful and peddling self remained through life their polestar.

THE SPECULUM QUESTION.

It is a "great fact" in connexion with the speculum question, that no well-authenticated list of *post-mortem* observations has been collected to illustrate this important subject. No attempt, save that contained in Mr. Pollock's paper, lately read before the Royal Medical and Chirurgical Society, seems to have been made to clear up doubts and to unveil the truth, save by angry invective and bitter abuse. This course we deprecate; it exhibits none of that high moral tone and philanthropical spirit of which we delight to boast,—it lowers in public estimation that confidence which it is our desire to possess as a body. Thus much we may fairly assert,—the speculum has been vastly too freely used. We repeat it without fear of contradiction,—there have been an unseemliness of conduct, and an indelicacy among some practitioners, (we hope only arising from hastiness and want of thought,) which have exposed the order to which they profess to belong to the opprobrium attaching to the practice of a Van Butchell or an Edey. We will not stoop to discuss the mental obliquity which confounds abrasion of the cuticle with ulceration: neither will we express our feelings with regard to the man who can profane the modesty and undermine the purity of the unmarried girl, by recommending an examination per vaginam, if she happen to complain of indisposition, or, as in a case we lately heard of, headache. Let him enjoy the fruits of his labours, and live in the odour which such practices emit.

Our present object is purely scientific. We call upon the gentlemen attached to the different Metropolitan Schools of Medicine to furnish us, from time to time, with an accurate account of the examinations made by themselves of the uterine organs in any number of consecutive female subjects. We beg of them to publish, without bias or favour, all that they can collect. the number of instances in which the parts (and especially the os uteri) are healthy; the character of the morbid changes when found; the complications with disease in other organs. Such a task, well performed, will ensure them the thanks, not only of the Profession, but of society at large, and set at rest a question upon which much angry excitement prevails, and much indecent, if not empirical, practice is founded.

We will name some of those esteemed contributors, whose honesty and accuracy require no voucher from us:—

Guy's Hospital . . .	Dr. Habershon.
King's College . . .	Dr. Brinton.
St. Bartholomew's . .	Mr. Coote.
London Hospital . .	Dr. Parker and Mr. Ward.
University College . .	Dr. Jenner.
St. George's . . .	Mr. Pollock.
Edinburgh Infirmary. .	Dr. Gairdner.

That these gentlemen will kindly perform the task we entertain no doubt.

PHARMACY BILL.

On Wednesday evening Mr. Bell moved that the Pharmacy Bill should be read a second time, with a view of its being afterwards sent to a Select Committee. The Secretary of State for the Home Department objected to the second reading of the Bill before it was sent to the Committee, on the grounds of the very large powers proposed to be conferred on the Pharmaceutical Society. As Mr. Bouverie observed, the effect of the Bill would be to give a trading monopoly to a chartered Company of which the House knew very little; and he added what we ourselves have urged, that the object of the Bill seemed to be, to turn chemists and druggists into apothecaries. The Bill, strange to say, after

the statement of Mr. Walpole, was read a second time. Doubtless, in Committee, the Bill will be greatly modified; but, considering the present state of the House in general, and of Mr. Bell in particular, it is very improbable that it will be made law. However, it is rumoured that the tactics which were so successful at St. Albans have not been without their influence in St. Stephens.

COLNEY-HATCH ASYLUM.

In our Number for January 24, we felt it our duty to record the exhibition made by Dr. Davey in the Cumming case, and to comment upon his declaration in favour of mesmerism. The Profession will be gratified to learn, that our remonstrances were not ineffectual; and that the Middlesex magistrates have proved themselves not unworthy of the trust reposed in them. They think with us that it were monstrous to permit a mesmerist to have the medical charge of their pauper lunatics; and, in consequence, Dr. Davey will resign his appointment.

Madness, we know, as hysteria, is sometimes "catching;" and, removed from its dire influences, we trust Dr. Davey may yet arrive at the conclusion, that to disbelieve in clairvoyance is *not* evidence of an unsound mind.

REVIEWS.

1. *London and Provincial Medical Directory.* London: John Churchill. 1852. Pp. 671.
2. *Medical Directory for Scotland.* London: John Churchill. 1852. Pp. 176.
3. *Medical Directory for Ireland.* London: John Churchill. 1852. Pp. 245.

1. The strictures which it was our duty to record on the *Directory* for 1851 have not been without their effects. The *Directory* for 1852 is much improved; considerable care is evinced in most of the details, and, without saying that the book is perfect, it is perhaps as correct as may be, considering the sources of information which are open to the Editors. As regards the homœopaths, we are not much disposed to quarrel with the Proprietors for inserting that mongrel genus. Without for a moment admitting that these persons would have had any *locus standi* in a court of law for omitting them, perhaps it is as well for the interests of legitimate medicine, that their names should be published in *our Directory*, if only to serve as a beacon, and warn us to avoid them. We are sent for to meet a man in consultation of whom we never heard. How shall we know him to be a homœopath and decline to go, except we have some list to which we can refer?

As addenda to the English *Directory*, we have this year separate volumes for Scotland and Ireland.

2. We have no hesitation in expressing a decidedly favourable opinion of the *Medical Directory* for Scotland. As a first attempt it was not to be expected that the work should be entirely successful, and in consequence we have, in looking through it, encountered a considerable number of errors. The following are a few of these, which we indicate in order to direct the Editor's attention to the variety of blunders most apt to occur:—Dr. W. H. Lowe is Physician to the *Saughton Hall*, not to the Soughton-race Institution. Dr. Douglas Maclagan is neither Surgeon to the Royal Infirmary nor Medical Officer to the New Town Dispensary, having several years ago, after an honourable service, resigned the latter, and about eighteen months ago relinquished the former. No more is his respected father, Dr. David Maclagan, President of the Royal College of Surgeons. The word *late* should in all these instances have preceded the appointments. Dr. *James* Sidey appears in the *Directory* as Dr. John; and Dr. W. T. Gairdner is called an F.R.C.S., whereas he is an *F.R.C.P.* Mr. Bonnar is *not* Surgeon to the Fife County Prison. Dr. Grace holds that office. Dr. Macdonald, also, of St. Andrews, is *not* Professor of Natural History. Did the Editor give the homœopath that title, or is it assumed for the occasion?

We conceive that the supplemental list had much better been altogether omitted; it serves no good purpose, while it presents the most ridiculous spectacle, of the name of the greatest of living Scotch physicians and philanthropists, Dr. Alison, in the same category as that of a *Cancer and Joint Rubber*, possessing no medical qualifications, and having, therefore, no business in the *Directory* at all. Why is the name of Dr. Charles Bell entered in the same list, when there is an unexceptionable history of the Doctor to be found at page 14? This exhibits a degree of unintelligible carelessness. In one particular, the Editor has not behaved with strict candour. Authors were requested to return a list of their contributions to Medical Journals to the amount of three, while it was expressly stated, that any above that number would not be recorded. This has not been attended to. Dr. Charles Ritchie's contributions are *ten* in number, and three-fourths of a column are occupied by the Doctor alone!

We have one other difference with the Editor—the price of his volume is too high; 2s. 6d. or 3s. would be more appropriate, though for this time, and at the outset of the undertaking, we are not disposed to grumble.

We trust these remarks will be received in the spirit in which they are offered. We wish the *Medical Directory for Scotland* all success, but we desire to have it as perfect and unexceptionable as possible.

3. As regards the Directory for Ireland, we have reason to know, that the want of such a registry has been very forcibly felt; and we have been not a little surprised that it should have been left to the enterprise of a London house at last to supply the desideratum. We are well aware, that an attempt was made some few years since by a Dublin publisher to establish an annual of this nature, and that a very well-edited little volume was the result; but unfortunately the scanty support which it received so completely discouraged the proprietors, that a second volume was not issued. Of the manner in which the Irish *Directory* has been produced, we cannot speak too favourably, considering the great difficulties attendant on the preparation of materials and first issue of such a work, while a glance at the supplemental list will show what carelessness was exhibited by many with regard to the printed forms furnished them by the editor,—a neglect the more unpardonable, as it would require only a few minutes trouble on the part of each individual. While on this point we may remark, that much circumspection and the co-operation of some resident medical man will be necessary to prevent personal descriptions and references to published works degenerating into puffery and quack advertisement. Indeed, we could refer to more than one instance in which literary achievements are blazoned forth without any regard to modesty. As long, however, as such references and statements are made *bonâ fide*, we can only regret that the authors had not a better sense of their own dignity. We must most strongly protest against the admission of such flourishes as the following:—

"Leslie, Hamilton, 3, Cullenswood-terrace, Ranelagh, Dublin—Lic. Phys. and Surg. Quebec, 1826; Discoverer of a Cure for Cancer and other Malignant Growths without an Operation."

We cannot conveniently search the register of the faculty of physicians and surgeons of Quebec; but we must say, that it could only be through great carelessness that the Editors of the *Medical Directory* would admit the announcement of a discovery of a cure for cancer, vouched for on such very equivocal professional authority.

In conclusion, we would strongly recommend the Proprietors of the Directories next year to combine the three in one volume—*tria juncta in uno*; by this means much repetition would be avoided, the price lessened, and the Profession better served; and, if they will further secure the services of gentlemen in Edinburgh and Dublin, as energetic as Mr. Harris is in London, we may next hope for a *British Medical Directory*, "*sans tache et sans reproche.*"

Researches and Observations on Scrofulous Disease of the External Lymphatic Glands, etc. By Thomas Balman, M.D., M.R.C.S., and one of the Medical Officers of St. Ann's Dispensary, Liverpool. London: Longman. 1852. Pp. 189.

This is an able and laborious inquiry into scrofulous affections, and contains much important and novel information. The results are drawn from an analysis of 141 cases of "external glandular scrofula," which presented themselves at St.

Ann's Dispensary, in Liverpool. The diagnosis of external glandular scrofula was made whenever the cervical glands were tumefied for more than two months, such cases being, however, excluded as appeared to arise from any local detectible cause, such as irritation of the scalp, etc. Dr. Balman justifies his use of this single symptom as a diagnostic mark, and then proceeds to tabulate his cases. The following are his chief conclusions:—Of the 141, 90 were males, and only 51 females; 48 per cent had light hair and complexions; 31 per cent. dark hair and eyes, the difference arising apparently from the majority of the population being light-complexioned; in 77·77 per cent. the age was under, and in 26·23 per cent. over, 15 years; of the whole 141 cases, scrofula commenced after 15 years of age in 17 only; and after 15 the number of females slightly surpassed that of males.

In 83·69 per cent., the neck only was affected; in 6·38 per cent., the neck and axilla; in 1·26 per. cent., the neck and inguinal regions; in 70 per cent., the neck and popliteal space; in 4·97 per cent., the neck and the glands above the bend of the elbow. As to the exciting cause of the scrofula, as far as it could be ascertained, measles, scarlatina, hooping-cough, etc., were assigned in 23·40 per cent.; exposure to cold and damp, in 14·18 per cent.; blows and other external injuries, in 2·12 per cent.; and syphilis, in 2·84. In 57·43 per cent., or more than one-half, no decided exciting causes could be assigned, although many patients had been exposed in various ways. As regards phthisis in the families of these scrofulous children, the following conclusion is given after some tables illustrating the point:—

"In 30 cases of the 141 scrofulous individuals there were no deaths from consumption in either parents or collateral relations.

"In 60 instances consumption occurred in 1 branch of the family only.

"In 40 instances consumption occurred in 2 branches of the family.

"In 9 instances consumption occurred in 3 branches of the family.

"In 1 instance in 4 branches.

"In 1 instance in 5 branches."—P. 37.

After these numerical statements, Dr. Balman enters on a consideration of the pathology of glandular scrofula. An able summary is given of the opinions of Mr. Phillips, Dr. Glover, etc. With reference to the blood, Dr. Balman states, that he has noticed, "in a considerable number of instances," a great increase in the number of white corpuscles in the blood; he has seen as many as 60 and 80 in the field at once, with a 1-4th inch object glass. In this chapter are some interesting observations on the urine, and among them it is stated, that the octahedral crystals of oxalate of lime after appearing will again dissolve in certain specimens of urine. This is a most remarkable fact, which we can verify.

The symptoms, progress, deviation, and varieties of glandular scrofula are given, and then the treatment is considered. We have only space to notice, that the iodide of lead ointment is strongly recommended; mercury, in the form of grey powder and the bichloride, has been found useful; the chloride of barium is also praised by Dr. Balman; cod-liver oil has been found to exert no influence upon the swellings, but to be very useful when the bones are affected, and in ulcers; alkalies do not meet with much favour; iodine has, Dr. Balman thinks, been overrated; phosphoric acid is sometimes useful. Dr. Balman does not appear to have used the phosphate of lime, so strongly recommended by Dr. Beneke.

The Stomach and its Difficulties. By Sir James Eyre, M.D. Edin. Churchill. 1852.

Who will not be pleased to learn, from the nicely printed scarlet-coloured little volume before us, that Sir James Eyre has, for the purpose of watching the ever-varying phases of that most important viscus, the stomach, renounced nocturnal professional avocations? The uterus no longer claims his anxious care. It always interferes with post-prandial digestion, and sometimes spoils the rubber. Sir James now offers to relieve the dyspeptic of his sufferings, by exchanging oxide of silver for metallic gold. And this he does in so jocund a style, with such hearty faith in his remedy, that we feel almost disposed to recommend patients to consult him, that they may enjoy, even for a brief period, the society of this polished, learned, and chatty physician. If he cannot cure you, he will amuse you, and you will leave his house with an extended view of human nature.

This pretty book is not confined to matters medical; it abounds in drolleries which are already going the round of the Sunday papers; it is a sort of professional Joe Miller, and a good railroad companion. Like the Comic Latin Grammar, it embodies a great fact, and inculcates a great principle, in a joke. Thus "the Rev. Robert Montgomery," says our author, Pp. 269, "once, while preaching a sermon, in order to raise a fund, whereby to build a church, startled some of his congregation, by saying to them in conclusion, 'Put the money on the plate; it is not yours'"—apropos, we presume, of the fee Sir James expects. We are also told of the boa-constrictor at the Zoological Gardens eating the blanket—illustrative, doubtless, that the serpent found it as difficult of digestion as the Profession will the book that records the interesting fact. But, joking apart, if there be any ill-tempered old gentleman who fancies himself "out of sorts;" or any squeamish editor troubled with a conscience, let them study "The Stomach and its Difficulties." The one will learn nothing of dyspepsia, but he will be amused, and may forget his sorrows. The other will laugh both at Sir James and his book, and take the thing for what it is probably meant—a joke.

Notes on Bright's Disease of the Kidney, as observed chiefly in the Clinical Ward of the Jamsetjee Jejeebhoy Hospital at Bombay. By C. Moarhead, M.D., Professor of Medicine, Grant Medical College.

This is a reprint of a paper originally published in the Tenth Number of the Medical and Physical Society of Bombay. It consists of a Report of thirty-one cases of Bright's disease, which passed under the observation of the author during thirty-three months. Dr. Morehead thinks that the frequency of Bright's disease is not to be attributed to the influence on the habits of the natives exercised by their intercourse with the lower classes of Europeans, because many of the individuals whose cases are detailed, Dr. Morehead says, must have arrived in Bombay already affected with the disease; these persons were from most varied nations, and of all castes. With reference to the habits of the patients, eleven had been confirmed spirit-drinkers; four had drunk spirits and taken opium habitually; four admitted that they took opium, but denied the use of spirits; two smoked ganja; two had been affected with secondary syphilis, one of the two being an opium-eater, the other a spirit drinker—neither had taken mercury; four denied the use of opium or spirits; and, with reference to eight, no note on the point was taken. On the whole, Dr. Morehead is disposed to attribute a decided causative effect to opium-eating in the production of Bright's disease, and thinks the cachexia arising from habitual opium-eating may in many cases be traceable to the presence of Bright's disease. This paper is well worth perusal.

Prize Essay on the Descriptive Anatomy of the Abdominal Viscera of the Horse. By Mr. John Gamgee. 1852. 8vo. Pp. 40. London.

Adventitious Products in the Choroid Plexuses of the Horse. By Mr. John Gamgee. 8vo. Pp. 6. London.

To the first of these two pamphlets the prize offered for competition annually by the Council of the Veterinary Medical Association was awarded. It is exceedingly well written, and richly deserved the honour bestowed on it. Our readers will find Mr. Gamgee's description lucid and concise.

The second paper contains an account of the anatomical structure of two tumours found in the lateral ventricles of the brain of a horse, one attached to either choroid plexus. The microscopical elements of these tumours were fatty granules, crystals of cholesterine, and little spherical calculi of phosphate of lime. The latter differed from those found in the human brain by Valentin, Bennet, and others, inasmuch as they had no animal basis. This paper is highly creditable to its youthful author.

Translation of the Pharmacopœia of the Royal College of Physicians of London. 1851. With Notes and Illustrations. By Richard Phillips, F.R.S., etc. London: Highley. 1852. Pp. 567.

We regret extremely not to have sooner noticed this valuable work. We did not receive it till after our review of the

Pharmacopœia had been prepared, and since then we have not been able to find a place for it. After Mr. Phillips' death, the work, already advanced and in part printed, was completed by Mr. Denham Smith. So ably has this been done, that no trace can be found of the division of labour, and neither in the style nor in the matter could we have discovered, without assistance, that a different pen had been at work.

The general character of the book is the same as that of former editions. It contains the same accurate notes and useful practical rules, with such alterations and additions as advancing science has suggested. Both to the practitioner and the student this work will be found most valuable; and it must be a satisfaction to Mr. Smith to know that he has so ably finished this valuable treatise.

FOREIGN CORRESPONDENCE.

FRANCE.

THE CONCOURS FOR THE CHAIR OF HYGIENE,

in the Faculty of Medicine of Paris, which we noticed in our Journal of March 6, has terminated with the appointment of M. Bouchardat, Pharmacien-en-Chef to the Hôtel Dieu, to the vacant professorship. We learn, also, that M. le Docteur Dupré has recently been elected to the Chair of Medicine in the Faculty of Medicine of Montpellier.

PUBLIC INSTRUCTION.

New decrees have just been issued in the official representative, *le Moniteur*, containing considerable modifications in the administration of public instruction, including medicine, as well as the other branches of arts and science. The professors of the different Faculties, and all the officials connected with the administration, are henceforth to be appointed by the President of the Republic, upon the proposition of the Minister of Public Instruction. The concours system is consequently abolished, and the Faculties have no longer the power of selecting their professors. The High Counsel of Public Instruction remains as before; but eight inspectors-general have been created, of which one is for medicine, and to this office M. Bérard, Dean of the Faculty of Medicine of Paris, has been appointed.

M BERARD,

in consequence of his new appointment, is going to resign that of Dean of the Faculty of Medicine of Paris. It is said that M. Paul Dubois, the distinguished physician-accoucheur, will be appointed in his place. M. Dubois is a member of the Medical Parisian Society, founded by Dr. Hughes Bennett, of Edinburgh, and has once occupied the President's chair.

GENERAL CORRESPONDENCE.

NOTICE OF AN OUTBREAK OF YELLOW FEVER IN DEMERARA,

IN A LETTER FROM DR. BLAIR, SURGEON-GENERAL OF BRITISH GUIANA, COMMUNICATED BY JOHN DAVY, M.D., F.R.S., INSPECTOR-GENERAL OF ARMY HOSPITALS.

[To the Editor of the Medical Times and Gazette.]

Sir,—The following copy of a letter from Dr. Blair to the Governor of British Guiana, which I have received from its author, with permission to use it as I may think proper, may be interesting to your readers, as descriptive of the development of yellow fever in a Colony exempt from it for many years, and especially as showing how the disease commenced, how its development was gradual, tainting and modifying other forms of fever before it showed itself unmasked in its proper form, and unmistakable

Dr. Blair's letter is accompanied by returns, the synopsis for the purpose of illustration alluded to therein:—1st, of the admissions into the Seamen's Hospital, in George Town, showing the transition to yellow fever, 73 cases; 2ndly, of cases of yellow fever received into that hospital, 93 in number, of which 15 proved fatal; and, 3rdly, of cases of the same disease, treated by him out of hospital in private practice, 30 in number, of which 3 were fatal. These three were seen in consultation, and in the advanced stage of the disease, when almost hopeless. These documents I do not send, owing to their length; you might probably think them unsuitable to the pages of your Journal. I hope, on account of their value, they will have a place in the new edition, now in preparation, of Dr. Blair's Monograph on Yellow Fever.

I am, &c. JOHN DAVY, M.D.

Lesketh How, Ambleside.

TO HIS EXCELLENCY GOVERNOR BARKLY.

Sir,—It is my painful duty to inform your Excellency, that yellow fever at present exists in George Town in an epidemic form. Since the beginning of November last, I have observed that many cases of what appeared the ordinary fever of the colony seemed modified and exasperated, as if some new irritant had been added to the endemic malaria. Indeed, as early as the 7th and 24th of October, a slight change in the usual manifestation of fever symptoms might have been observed in a few cases. But, from the beginning of November, the change became marked. Unusual flushing of the face, vascularity of the eyes, trifling hæmorrhage, supra-orbital headache, and epigastric oppression, supervened on a first or second paroxysm of fever, and such cases were intercurrent with normal intermittents. In one or two instances, sudden and unexpected death occurred. The evidences of a new virus (new, because unknown for several years) poisoning the atmosphere continued to accumulate, and its specific character has gradually developed itself, until it has become too manifest that we are again invaded by a similar epidemic to that of 1837.

Although yellow fever has prevailed both in Cayenne and Surinam during the last twelve or eighteen months, there is no circumstance that has come to my knowledge which at all countenances the supposition, that our disease has had its origin in importation. The manner in which the epidemic has commenced with us,—at first by slight contamination of the ordinary fever; its graduated intensity, still as an epiphenomenon; at length the agglomeration of its symptoms into a primary and individual affection, defective, however, in one of the characteristics of well-defined yellow fever; and, finally, about the 30th of last month, assuming the perfect signs of the most virulent type,—will be illustrated by the subjoined synopsis of peculiarities in cases admitted to the Seamen's Hospital from the 12th of November to the present time.

I may mention to your Excellency, that in private practice I have had two cases of yellow fever, occurring in the neighbourhood of Robbs Stelling, and which commenced on the 2nd and 3rd inst. respectively. A fatal case is reported to have occurred on the 22nd ult., in Carmichael-street, to leeward of the "Long Pond." The cases which have occurred in the Colonial Hospital among the Portuguese immigrants will be appended to this communication. In reference to this matter, I would respectfully request that the harbour-master be directed to wait on every ship-master in this port, and urge that the state of health of his crew be ascertained by him two or three times in every twenty-four hours, and, in event of any ailment being discovered—no matter how slight or unimportant in his eyes—that immediate medical aid be procured, for the chief power of medical treatment in our yellow fever is in averting the seizure by medicine directed against the early or formative stage of the disease.

I would also request that the harbour-master or master-pilot be required without delay to ascertain and record the exact site of the moorings of each vessel that has been in harbour during the last three months, more especially the locality of those vessels which have suffered most, in order to discover the relation of position to salubrity, to be practically applied hereafter among the preventative measures. It would also be desirable to ascertain if there be any indications of the epidemic constitution in Berbice or in other parts of the colony, and to note the exemptions, in order to be provided with information in event of the troops requiring to change their quarters. For this purpose the services of the physicians to the Berbice Hospital, and those of the gaol surgeons throughout the Colony, would be available.

It may be remarked, in conclusion, that this invasion of yellow fever has occurred during unusually fine weather, a dry and cool Christmas time, and, in regard to other diseases, uncommon healthiness.

I have he honour to be, your Excellency's most obedient servant,

(Signed) DANIEL BLAIR, M.D.,
Surgeon-General of British Guiana.

Public Hospital of Demerara and Essequibo,
January 6, 1852.

REMARKABLE CASES OF GESTATION.

[To the Editor of the Medical Times and Gazette.]

Sir,—You will, I am sure, allow me to make a few remarks upon Dr. Foley's letter, inserted in your Number of February 28.

I endeavoured, from Dr. Foley's account of his case, to place correctly the probable age of the "blighted ovum," at the time of its exit, and the duration of the continued pregnancy, with the living fœtus afterwards. These calculations, then, however erroneous, do not affect the fact of a twin conception, or that a "blighted ovum" came away while the remaining fœtus lived. Correct data and explicitness in stating facts, in order to establish safe conclusions, are a great desideratum. Here is an instance of the reverse. Dr. Foley was called to his case first "towards the end of last May," and that "the patient described herself as having reached the third month of pregnancy." I therefore put the time, as it was towards the end of May, at the 27th of that month; and the patient having "reached the third month of pregnancy," I inferred that she might be about the middle of that period, though I should have been more justified in placing it at the commencement, for to reach is to arrive at. But Dr. Foley says, he means by "reaching the third month," that it was "the completion of it, not the beginning, nor the middle, but the end of that period." Had it been so, the lady had reached the fourth month of her pregnancy, or nearly so. Whether, then, a few days were added or deducted in this case does not affect the interest or the fact of it in a physiological point of view. In calculating the periods of utero-gestation, I have ever found the safest to be that by the lunar month reckoning; for, taking any period of time after February, say from the 1st of March, a nine calendar month pregnancy will, to 30th of November, be 275 days—a ten lunar month pregnancy is 280 days. Where is the great difference? Dr. Foley says: "There is no doubt the term of the gestation (in question) was the usual one of nine calendar months; and yet Dr. Ridge's calculations are erroneous." Well, there are only five days difference even had I put her probable pregnancy earlier; but this is only "splitting hairs," and does not affect those facts which I have been so long wishing to see established. One portion of my views in these cases is again confirmed by Dr. Foley, who says, "There was no sign whatever of putrefaction on the solid substance, whatever name it be called by." This, again, proves that the dead or blighted ovum, in all cases where it has been observed, has not been in a decomposed state when discharged, however long it may have been retained. Dr. Foley having had so clear a case to add to the testimony of others, should look to a scientific, not personal, correction of the term "mole." I merely "drew attention" to that term as wanting in itself a scientific expression of a fact; and to show you, Sir, that I was not out of order in so doing, Dr. Foley's own evidence proves its unscientific and undefined character. He says: "There is no doubt that the substance discharged after the hæmorrhage was an imperfectly impregnated ovum, which I, casually using an ordinary term, designated a 'mole,' that it might be understood as a solid fleshy body, containing no rudiments whatever of a fœtus to distinguish it from a similar substance containing such rudiments, and more properly a 'blighted' ovum." The act of conception I hold to be the formation of a rudiment for a future being, and that rudiment, in the form of a small white substance, will always be found in a blighted ovum within a vesicle containing a small quantity of fluid, situate in the said "fleshy body," or ovum, which is the placenta, which placenta grows and has a viability independent of the fœtal vesicle; else, how could it increase? Therefore, without these two circumstances combined, it is no blighted ovum, or ovum, or rudiment of conception at all. Dr. Foley evidently seems to imagine that a blighted ovum, to be such, must contain distinguishable portions of a fœtus. Not at all,—the blighted ovum is what I have described it to be; nothing more, nothing less. All substances differing from this, whether clot, fibrinous structures, or otherwise, are not ova at all. The blighted ovum implied, or meant, by Dr. Foley, is a totally different affair, and comes under the head of the death of the fœtus after its distinct formation, and which also can be retained in utero, without injurious consequences to the patient, for a longer or shorter period of time, and even without putrefaction, precisely as can the true blighted ovum.

In *Lancet*, October 15, 1836, p. 133, is Mr. Leeson's case of twins. One living child and one dead fœtus, of about four months' viability at the time of its death, which came away undecomposed after the living child. Also, *Lancet*, Nov. 12, 1836, p. 256, Mr. Hunter's three twin cases:—1st. One living child and one dead fœtus,—considered the dead fœtus had had seven months' viability. 2nd. One living child, and one dead fœtus of about four months' viability. 3rd. Both dead fœtuses, of about four months' viability, and which remained in utero, without putrefaction, some ninety-five days after viability had ceased. I cite these cases to show their distinguishing differences, because Dr. Foley, in his first letter, asked the correspondents of the *Medical Times and Gazette* for information, which has been a source of pleasure for me to afford to the best of my ability. I may add, that it is well known to butchers, that cows will retain their calves for an unlimited time in utero after the parturient period, without injurious effects, and still supply milk and be in good condition, nature providing against all decomposition or putrefaction.

Again, Sir, with respect to the case of Mr. Williams. Much as I desire that the Profession should be well informed of the fact of blighted ova remaining in utero from the time of conception to the full period of utero-gestation, without putrefaction, or without let or hindrance, or in any way affecting the mother injuriously, yet I would not chronicle one single case in support of my views, unless clearly defined and beyond a doubt. In your number of 11th February, Mr. Williams says, "On the 30th of this month (May) after suffering great pain in the back and pelvis for some hours, she (Mrs. T—) was suddenly seized, while dressing, with profuse hæmorrhage, in quantity sufficient to fill two chamber utensils, as well as saturate her clothing. A large fleshy substance, and some smaller portions, were expelled at the same time, (unfortunately disposed of before my arrival.)" Now this, Sir, unfortunately disposes of the case as well.

Dr. Foley's and Mr. Underwood's cases may be legitimately added to any list as proof of the prolonged retention of dead ova; but Mr. Williams's cannot. It might have been, or it might not have been, a case in point—there is a doubt resting upon it from the absence of the physiologist's ocular inspection of what he was told *there* was "a large fleshy substance," but which was unfortunately disposed of before his arrival. It was owing to so many cases of this kind occurring in my own practice that led me to suspect them to be more than simple floodings, with coagula or fibrinous masses. I could, from my note-book, insert a score or two of these, but I refrain from throwing any doubt or discredit on a physiological fact of great importance, by inferences that they might be "blighted ova."

I am, &c.

Putney. BENJAMIN RIDGE, M.D.

FINAL CAUSE OF MENSTRUATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—If your pages are still open to further communications on the subject of "The Final Cause of Menstruation," I should be glad of space for the following remarks.

The chief peculiarity in Dr. Ramsbotham's views, and, indeed, the only one which is very novel, is, that the menstrual discharge, as it appears normally, is but the elements of undeveloped deciduous membrane cast off as useless, in consequence of non-impregnation of the ovule. That there is a close, and probably constant, relation between the occurrence of the menstrual flow and the discharge of an ovule from the ovarium, has long been admitted by the most observant physiologists; indeed, it has come to be ordinary text-book doctrine. We have not yet, it is true, positive proofs of the constancy of this relationship. Drs. Baly and Kirkes, in their Supplement to Müller's Physiology, say: "The number of facts at present collected are insufficient to establish it as a law, that an ovum is discharged from the ovary of the human female *at every normally developed period of menstruation*." The italics are theirs. But the facts we do possess "strongly favour the opinion, that the generative system of the human female is subject to the almost universal law of the periodical discharge of ova;" and "there are strong grounds for believing that the discharge of ova is confined to the periods of menstruation."

To enumerate the facts and arguments from which these conclusions are drawn seems unnecessary. They may be referred to by any one; and I am not aware that anything subversive of them has since been advanced.

Hence, in considering the final cause of menstruation, we must of necessity take into account the high probability of these data, and we may, I think, fairly argue from them.

Dr. Ramsbotham appears to reason something in this way:—"At each normally developed menstrual period an ovum separates from its ovarian bed, and, in case of non-impregnation, perishes in the Fallopian tube or uterus; but in case of impregnation it is vivified and retained in utero, where is developed a new formation—the deciduous membrane. Animals lower in the scale than man do not menstruate, neither have they any decidua. Should impregnation take place in the human female just before an expected menstrual period, the menstrual flow may not take place. From all this it would appear probable, that the menstrual discharge is the pabulum from which the decidual membrane is produced." Now, one, at least, of Dr. Ramsbotham's premises seems incorrect; and his conclusion does not agree with certain facts and observations of first-rate importance in the present state of our knowledge. Some of the lower mammalia have a true decidua. Dr. Sharpey, whose researches on this subject are well

known, was led to his discovery, that the decidua is no new formation, but in reality an alteration of the internal lining of the uterus itself, by an examination of the decidua of the bitch. His after examination of the human decidua coincided with this view, and the tendency of more recent observations by other physiologists has been, on the whole, confirmatory. Professor E. H. Weber has fully established the truth of Dr. Sharpey's observations. Such facts as these, based on most accurate microscopic investigations, are quite sufficient of themselves, I think, to overthrow any adverse opinion based on mere reasoning. Besides, mere reasoning does not so entirely agree with what Dr. Ramsbotham has advanced. If his theory be true, we should expect, as was stated by one of your correspondents, that impregnation ought generally to be effected a short time prior to a menstrual period, whereas the reverse is the case: so much so that Naegelé was accustomed to reckon the duration of pregnancy at nine months and eight days from the last menstrual period, and in normal cases was never wrong. To conclude: the opinion fairly to be inferred from data we at present possess, and which I am inclined to advance is, that the menstrual discharge should be viewed rather as an indication that the internal lining of the uterus is preparing for the decidual change, if necessary, than as waste pabulum, from which a decidua might have been formed.

I am, &c.

Liverpool. THOMAS F. GRIMSDALE.

THE STATISTICS OF MORTALITY AT PUBLIC INSTITUTIONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—We are indebted to the Registrar-General for a detailed account of the mortality during the past year in the various public institutions of London; and when it is stated that no less than ninety-six institutions have here their statistics appended, comprising the number of their inmates during each of the four quarters of 1851, with the average; the number of deaths during the same periods, and the annual mortality per cent of the average number of inmates, it is obvious that we here possess a mass of data of the greatest importance, no less to the medical Profession than to the hygeist and philanthropist. What, then, is to become of these statistics? Is the matter to end with the bare record by the Registrar-General? I think it fully capable of demonstration that such ought not to be the case, and for the following reasons:—In 1850 a similar statement was put forth from Somerset-house; there it was shown, that in the General Hospitals of London a very dissimilar rate of mortality prevailed, and many were the protests and sophisms offered why a greater per centage of deaths occurred at those places than in others. Surmises, speculations, theories were advanced; but, as to facts, there the matter stood, and no authentic statistics were adduced by the various hospitals to explain the disproportions. The statistics for 1851 give us the same phenomena, *e. g.*

General Hospitals.

	Average inmates during the year.	Total Deaths.	Annual Mortality per cent. of average number of inmates.
St. George, Belgrave ..	275	255	92·73
Westminster, St. Margaret	131	119	90·84
Charing-cross	100	79	79·00
Middlesex, All Souls ..	255	173	67·84
University College	86	116	134·88
Royal Free	57	40	70·18
King's College..	106	120	113·21
St. Bartholomew's	522	444	85·06
London	308	258	83 77
Guy's	475	424	89·26
St. Thomas's	449	238	53·01
Total ..	2762	2266	82·04

Now, with such results as these before the authorities of the various hospitals, is it too much to expect that they should be at some pains to explain the discrepancies, in order that the more general reader may avoid the blunder (if so it should turn out) of representing that University College suffers a mortality more than double that of St. Thomas's, and nearly double that of the Royal Free, and that King's College has double the number of deaths in a year to those in the Middlesex Hospital? We are told, and the public believes, that very accurate records of cases are kept in these institutions. Then surely there is no necessity for general statements or theories, in order to get over this difficulty. Let the various authorities either show the figures of the Registrar-General to be at fault, or let them do their duty, and explain a fact (by facts) which the public will take as an index to the professional capacity of the officers of these institutions.

There are, however, other matters in the Table of the Registrar-General well deserving of attention. It should be considered, that, during the past year, the Hospitals for Special Diseases (with an average of 254 inmates) have suffered a mortality of 100 per cent.; that whereas the average rate of mortality in Lunatic Asylums has been 10·51 per cent., yet that in Blacklands House, Chelsea, the rate has been 17·39 per cent., while at Bethlem it is less than half that number (7·67); that, as to workhouses, with an average rate of mortality for all of 22·95 per cent., Whitechapel, North, has had 52·46 per cent. of deaths, St. Giles's, South, 42·92 per cent., Stepney, Mile End Old Town, 39·39 per cent.; while in the workhouse of Whitechapel, Mile End New Town, the mortality has only been 8·33 per cent.,—14 per cent. under the average for all workhouses. Many other such contrasts might be brought out. These, however, are quite sufficient for my purpose, and I must urge it upon those whose special duty it is to protect the institutions with which they are connected from wrong and most injurious impressions on the public mind, at once to come forward with satisfactory statistical explanations. Let University College show that there are elements to be brought into the account which will put their rate of mortality on a level with the most favoured in the Registrar-General's Table; let us know, not merely the fact, but why, in Hospitals for Special Diseases, there is a death to every inmate during the year; let the keeper of Blacklands House Lunatic Asylum show us, from his carefully kept records, that there were circumstances about his cases which had not happened in those at Bethlem; and, more generally, let Parliament call for such an inquiry as shall fully explain, and not leave open to conjecture, the why and the wherefore of prisons having only 1·20 per cent. of mortality, while workhouses have 22·95 per cent.; and thus take it out of the mouths of the improvident and dissipated, that there are better hygienic conditions to be found in the cell of the felon than in the asylum for the penniless. We fully recognise the distinction to be made between prisoners taken in the vigour of life, and paupers admitted after years of privation and suffering; but still it is worth inquiry whether 1 per cent. and 22 per cent. *fairly* represent the comparative mortality in each of these conditions of life.

I believe, Mr. Editor, that there is much valuable truth involved in the inquiries here suggested. I beg to suggest that facts must be brought to bear on the Registrar-General's facts, and that mere hypotheses will be waste-paper in the discussion.

I am, &c. B. SMITH.

[The observations of our correspondent were fully answered when this subject was under discussion last year. We would refer especially to the remarks of Dr. Hare, of University College.—ED. *Med. Times and Gazette.*]

ON THE CONNEXION OF THE SO-CALLED DUMB-BELL, OR RENIFORM CRYSTALS WITH OXALATE OF LIME DEPOSIT.

[To the Editor of the Medical Times and Gazette.]

SIR,—Should you think the following remarks worthy of notice, may I beg a place for them in your valuable Journal.

I have found on several occasions, that by dissolving lithic acid in caustic potash, and precipitating the same by the careful addition of hydrochloric acid, crystals have been formed of the shape above alluded to; but to secure such a result, it is required that a concentrated solution of the lithic acid should be formed before adding the mineral acid, and the precipitate allowed to settle entirely, previous to examination with the microscope. If the alkali is used in excess, crystals of the form in question are not thrown down. These deposits, I am aware, have been referred by other observers to the lithic-acid series; still it is, I believe, a disputed question, and therefore my only object in this communication is to show the possibility of reniform crystals existing in urine when no oxalate of lime is present, and, therefore, that the microscopic test alone should not be deemed conclusive evidence of the presence of oxalate of lime, because crystals of a dumb-bell shape are visible.

I beg to forward for your examination a specimen of them, also a portion of the lithic acid from which they were prepared.

I am, &c. THOMAS G. SALT.

Rugely, Staffordshire.

[As there has been much doubt about the dumb-bell form of

lithic acid, and as the question is one of great interest, we have carefully examined the two specimens sent us by Mr. Salt, and the following is the result:—

"1. Specimen in paper.

"Reddish colour.

"Under microscope, is crystallised uric acid with organic matter, apparently in part epithelium (vesical and vaginal? casts of tubes?) *Acetic acid* dissolves or makes transparent the organic matter, and brings out very plainly the fine crystals of the acid. *Liquor Potassæ* dissolves the acid and some of the organic matter. *Acetic acid* throws down from the potash solution a white organic precipitate, insoluble in excess, and uric acid. In addition to these forms, there are some few large, round, dark yellow masses, unaffected by acetic acid or by potash, and of uncertain nature (impurities?)

"The *murexid test* shows abundance of uric acid.

"2. Specimen in watch-glass.

"White colour in mass, dark under microscope.

"*Under microscope*, numerous beautiful dumb-bell crystals, often striated on the surface; isthmus of many very narrow and prolonged; also dark masses, made up partly of coherent dumb-bell crystals, and partly of broken dumb-bells, and of some few irregular nodules and granules.

"*Acetic acid* disintegrates the masses, and brings out the dumb-bells beautifully; also shows some oblong forms, rather tapering at each end, and clearer in the centre than at the apices. In some cases there seem to be transitions from this form into the dumb-bell by enlargement of the opaque ends.

"*Liquor Potassæ* at once dissolves the whole.

"The *murexid test* shows abundance of uric acid; it seems, indeed, as if it were entirely made up of uric acid; but this point cannot, for want of time, be strictly inquired into."

So far, Mr. Salt's interesting observation is completely borne out by independent testimony. We would recommend him to see whether he can produce the dumb-bell crystals from the purified uric acid, as obtained from the boa, for example, and purified. That would be a decisive experiment.—Ed. *Med. Times and Gazette.*]

USE OF THE SPECULUM.

[To the Editor of the Medical Times and Gazette.]

Sir,—The subjoined case so closely illustrates the valuable assistance not unfrequently afforded by the speculum in the diagnosis and treatment of uterine diseases, that I am induced to send it in as concise a form as I can for insertion in your Journal, where it may chance to meet the eye of some of those who deem the utility of that instrument questionable.—I am, &c.

Augustus Drake, M.B.,
Exeter. Physician to the Exeter Dispensary, &c.

Mrs. C. H., aged thirty-nine, married, residing near Chudleigh, consulted me last November for what she stated to be "cancer of the womb." She has borne five children, and always enjoyed good health, until a year ago, when she began to feel occasional pain and uneasiness in the genital region, which was quickly followed by a leucorrhœa, and much general weakness. She noticed at the succeeding monthly period a diminution in the quantity, and a paleness of the menstrual fluid, which had before been, except during pregnancy and lactation, regular and rather profuse from the age of fourteen years.

She applied to her usual medical attendant, and by the use of vaginal injections, and a general tonic treament, she materially improved, the leucorrhœa lessened, and she gained strength.

Some pain, however, and not a little discharge, remained. After the lapse of a few months, during which she slowly retrograded, another practitioner was applied to, by whom a similar mode of treatment to that already mentioned was adopted, but with very different results: the discharge became profuse, and occasionally fetid; genital pain and uneasiness increased in duration and severity; and her general health rapidly declined.

Distrusting, as I naturally might, the previous treatment, and a digital examination failing to clear away my doubts, I brought the speculum to my aid.

The os uteri was seen swollen and puffy; upon its anterior lip, and extending towards the cervix, some six or eight spots of a light-brown colour appeared, about the average size of a split-pea, their margins irregular and somewhat serrate. I could readily brush away their discoloured portions, which left beneath a superficial smooth ulceration of the mucous tissue. The cervix presented an unusual vascularity, and projected low in the vagina, which was flaccid, very capacious, and moist.

I requested a brief stay in Exeter, during which time I had three opportunities of washing the diseased surface with a dilute solution of borax, and smearing the ulcerations with a strong nitrate of silver paste.

Some domestic matters removed her from my observation earlier than I could have wished, but I lately learned that she rapidly improved, and is now quite well.

The above needs no comment to convey its import to every candid inquirer.

The smooth surface and superficial character of the ulcerations clearly account for their non-detection by the finger.

CASE OF CONSTIPATION OF THE BOWELS.

[To the Editor of the Medical Times and Gazette.]

Sir,—Should you think the following case worthy of insertion, I shall feel obliged by your giving it a place in your valuable Journal, not only as an inducement to practitioners to persevere in their treatment, where they know it is right, even against all hope, but also as an extraordinary instance of the powers of Nature aided by medicine where there did not appear to be the remotest chance of success.

The case was as follows, copied from my private register:—

Feb. 4, 1852.—Was called in to see Mrs. C., aged 52, of Braunston, wife of a mason, mother of five children, of delicate constitution, and for the last thirteen years suffering severely from acne rosacea, which has destroyed both alæ of the nose, to some extent, though now much less severe in character and very faint. The woman when I saw her was apparently in articulo-mortis, but conscious. She complained of violent pain in the lower part of the abdomen, occurring at intervals of about ten minutes, and relieved slightly by pressure, accompanied by vomiting of bilious and stercoraceous matter, constant hiccough, cold extremities, subsultus tendinum, clammy perspiration, constant desire to make water, which was passed in quantities of about a teaspoonful; tenesmus, constipation of twelve days' standing; pulse small, barely perceptible, frequent; tongue dry, but clean. She had a blister lying over the abdomen, which had produced slight vesication, but which, she said, had only aggravated her sufferings. I dressed it, and applied hot, dry bran over the whole of the abdomen, and ordered her a pill of two grains of calomel with one grain of opium directly, and every two hours, and gave her as a drink, to allay thirst and relieve the acridity of the vomiting, one part aq. calcis and three parts milk. After taking four pills, the hiccough ceased, and the vomiting became less frequent, the intervals between the paroxysms of pain being longer, and the desire to pass water less urgent; she dozed at times, and passed altogether a quieter night, having only vomited three times in twelve hours. I continued the pills, not waking her to give them, and administered beef-tea clysters, which were at first returned immediately, but without bringing away any stercoraceous matter. Pursuing this treatment, with the substitution of brandy and egg beaten up in it, which she drank in lieu of the milk and lime water, she remained much in the same state until the 12th, seven days from my first seeing her, the vomiting, however, becoming less and less frequent—once or at most twice in the twenty-four hours—and the pain becoming fixed in one spot, which she could cover with her three fingers, situated in the right iliac region; on that day (the 12th) the bowels were suddenly relieved, after altogether nineteen days' constipation, and she passed copious bilious evacuations rapidly in succession for ten or twelve times in six hours; and I feared she would sink from exhaustion, as she now lost all perceptible pulse, and, for the first time, became delirious. I administered brandy and ammonia freely at short intervals, keeping hot applications to the legs and feet, and after the bowels ceased to act so rapidly, which they did in about eight hours, she rallied and became conscious. From this time she had not one bad symptom, but gradually recovered, and is now quite well and able, although weak, to superintend her household duties. The acne, which had almost entirely disappeared during the illness, has now become more vivid, but not more so than is usual at this time of year.

Apologizing for the length of this communication, which I have

been induced to make for the reasons I have stated above, and because the case had been given over by her usual medical attendant as hopeless, I am, &c.

FRANKLIN HUDSON, L.A.C.

"The Willows," Braunston, Daventry.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. HODGSON, Esq., F.R.S., President, in the Chair.

CASE OF STRICTURE OF THE COLON, SUCCESSFULLY TREATED BY OPERATION AFTER THIRTY DAYS' OBSTRUCTION; WITH AN ANALYSIS OF FORTY-FOUR CASES OF ARTIFICIAL ANUS.

By CÆSAR H. HAWKINS, Esq., Surgeon to St. George's Hospital, and Vice-President of the Royal College of Surgeons of England.

In this case a lady, about 44 years of age, was relieved by the performance of Amussat's operation on the descending colon, in August, 1851, from the effects of nearly complete obstruction in the sigmoid flexure of the colon, and continues in good health to the present time, experiencing so little inconvenience as to be able to enter as usual into society, the artificial anus being kept free by means of an ivory plug of proper size and length, the natural passage being only in part restored. The author proceeded to say, that although M. Amussat could only find six instances of artificial anus, when he brought forward his "Memoirs" in 1839 and 1841, the operation had been performed in almost every year since that time, and four persons were now living in London, whose lives had been saved by its performance; he thought, therefore, that sufficient cases might now be brought together to show what was the real value of the operation in surgery. He had therefore framed tables of every published case with which he was acquainted, and of seven unpublished cases besides his own, for the particulars of which he was indebted to the operators. The tables were divided into those which had been operated on through the peritonæum, seventeen in number, and those in which the bowel had been opened external to the peritonæum, which amounted to twenty-seven cases; and they showed the name of the operator and the date of the operation, with references to the published accounts of each case; the sex and age of each patient; the nature of the obstruction; the part which had been opened, and the mode in which the operation was performed; and the result with the date of the death or of the last account of the case; and, finally, the cause of death, and the condition of the patient if alive. The results of the operations were next tabulated, from which it appeared (omitting one case in which the operation was performed for fistula) that ten had died within forty-eight hours after the operation, and twenty-one within the first five weeks; and that twenty-two only could be fairly considered as having recovered from the operation. It was next shown, that of the twenty-two which recovered, six died in about six months from the time of the operation; others were still alive, or were so at the last known date; and that only nine patients were as yet known to have survived as much as one year. Against this apparently unfavourable result, the author brought forward proof that, whatever the time was that the patient had survived, life had in every case been clearly prolonged by the operation, since Mr. Luke's case was the only one in which the fæces had chiefly passed by the natural anus after the operation; in Mr. Clement's case, which lived three years, not even flatus had passed per anum; and in Mr. Maitland's case none whatever had passed naturally after the first two years, although the patient survived the operation seventeen years. A number of tables were next brought forward, but were only partially read at the meeting, to show how far the results might be influenced by different circumstances. The sex of the patients did not appear to have any influence; the table of ages showed the curious fact, that of eight persons not exceeding thirty, who had been operated on, no less than five had died, while of seven exceeding sixty, only two had died; but, nevertheless, age exerted less influence than might be supposed from this circumstance, since the cases below forty and those above fifty each showed nearly an equal number of deaths and of recoveries. The table of diseases for which the operation was performed showed that no less than seventeen were believed to be cancerous; but although the immediate deaths were slightly increased by the debility of cancer, the deaths of those that recovered were not caused at an earlier period than in non-malignant diseases. It was next shown from the tables of the assigned or apparent causes of death, both in those who recovered, and in those who died in the first five weeks, that scarcely any died from the operation, but that organic changes or other effects of the disease itself could in almost every case be clearly traced as the ground of want of success at first, or of death at an earlier period after the operation. The tables of the situation in which the artificial anus was made, led to remarks on the comparative propriety of Littré's or Callisen's operations, from which it appeared clearly right to operate externally to the peritonæum on the right side of the body; but the question was left undecided as to the descending colon, so far as the much smaller number of eight cases, compared with twenty, could decide the point; the dangers of peritonitis, the facility of keeping open the artificial anus, and the errors of diagnosis, being discussed *seriatim* with reference to the choice of the mode of performing the operation. With regard to the latter point of the diagnosis, Mr. Hawkins showed, that very few errors appeared to have been committed in deciding whether the opening ought to be made in the right or left colon, and, consequently, that there was no necessity for always operating on the right side, as M. Baudens had advised, even when the obstruction was believed to be in the rectum or sigmoid flexure. But the author brought under notice several cases, showing the difficulty of distinguishing whether an obstruction was situated in the small intestines or in the large, and that, even when the peritonæum was opened, the seat of the obstruction had not always been discovered, the difficulty being, as it seemed, liable to be increased still further by the existence or supposed existence of a hernia, of which some instances were also given at the conclusion of the paper.

Mr. Norman desired to draw the attention of the Society to one or two points connected with diagnosis in these cases of obstruction,—a matter often of great difficulty and importance. He would first refer to the occurrence of diarrhœa before the obstruction becomes complete,—a symptom spoken of by Mr. Adams in the case which he had described at the previous meeting of the Society, and which had also caused considerable difficulty and annoyance some time since in a case under his own (Mr. Norman's) charge. The patient was an elderly lady, who, seven or eight years ago suffered for three or four days from diarrhœa, which, without being profuse, was frequent. This was followed by complete obstruction, and by vomiting, which was afterwards of a fæcal character; the abdomen next became tympanitic, and the case eventually ended fatally. The indications were not of a nature to lead to the conclusion that the large intestines were the seat of the obstruction, nor, indeed, even to show where it was situated; but on the examination of the body after death, a stricture in the lower third of the ileum was discovered, the result of an attack of abdominal inflammation that occurred several years before, and which was so narrow, that a probe could scarcely be passed through it; nevertheless, scybalæ were found in the intestine below it. These had probably passed through the stricture while in a liquid state, and had subsequently become hardened, from the removal of the more fluid constituents. The small intestines, in addition, were all matted together by old adhesions, from the lymph poured out during the attack of peritonitis, and could scarcely be separated. In the next case, that of a tradesman,—there was considerable difficulty in making out the diagnosis of the cause and seat of obstruction, as the patient had had a similar attack of obstruction a few years previously, which had yielded to medical treatment, and he (the patient) had subsequently enjoyed good health, until indeed the next occurrence of obstruction. Neither was the fact of a previous attack of this nature the sole cause of the difficulty of diagnosis in this case; for this patient, after undergoing great suffering, and after being in evident danger from the increasing severity of the symptoms under which he laboured, apparently got much better, and seemed to be approaching convalescence; but unfortunately all the symptoms became worse again the same evening, and the poor man soon sank. The body was examined after death, and a loop of small intestine found to be strictured by a diverticulum, crossing over the bowel in front of the spine, and adherent to the brim of the pelvis on the right side. The great point in these cases is to discover the seat of the obstruction, on which at present not much light has been thrown, nor was the seat of the pain a good guide for that purpose, as it is often at a distance from the part where the obstruction has occurred. In his (Mr. Norman's) last case, the obstruction was below, and to the right of the umbilicus, while the pain, on the other hand, was complained of as being to the left of the navel and above it. Mr. Norman then commented on the case which had been described to the society that evening, and said that Mr. Cæsar Hawkins' remarks on the difficulty of diagnosis were of very great importance. In his own case, the swelling of the colon showed where the seat of the obstruction would be found, and the symptoms led to the conclusion that the patient was labouring under serious organic disease of the upper part of the rectum. He (Mr. Norman) was

satisfied that, in general, Littré's operation was to be preferred to that recommended by Amussat.

Mr. Adams briefly referred to the case he had narrated at the previous meeting, adding, that after the operation the patient had full control over the intestine, and was in perfect health.

Dr. Murphy asked Mr. Cæsar Hawkins whether he had ever operated thus on infants with imperforate anus. He (Dr. Murphy) thought that it might be done successfully, as from the cases narrated it appeared, that, after its performance on the adult, the patients had survived two or three years, and in one instance as long as seventeen years. He (Dr. Murphy) had had it performed once for the relief of that malformation, but the operation was unsuccessful, because it was done too late; at least that was his opinion(a).

Mr. Cæsar Hawkins had not performed the operation for that purpose, nor had he alluded to it in his paper. He was, of course, aware that it had been performed in such cases, sometimes with a successful result, at other times with failure. Of course it could not be expected to be successful in all cases, as the seat of obstruction varied so greatly in different cases.

Mr. Partridge had once performed this operation on a child for imperforate anus a few days after its birth. He had not experienced any difficulty in finding the colon in the loins, but the child died soon afterwards from the bursting of the intestine.

The President remarked, that a knowledge of the means of diagnosing the seat of obstruction in these cases was very important, but was attended with great difficulties. The fulness or distension of part of the intestines is a very imperfect and uncertain sign, for in persons who are fat, or where the disease is of some duration, the fulness will be general all over the abdomen. The history of the case in its full details, the place where distension was first observed after the occurrence of obstruction, with other symptoms, will aid the diagnosis as to the seat of obstruction, but the most important sign as to the large or small intestines being obstructed was the existence of vomiting. When the obstruction is low down in the colon, vomiting does not come on until late in the disease, or until the intestine is very much loaded. When the obstruction is in the small intestines, emesis occurs very early, and, if it be not stercoraceous, the seat of the disease, it may be fairly concluded, is in the small intestines. The cases lately related bore out this remark. The question as to the propriety of adopting Amussat's or Littre's operation must be decided by the particulars of each case. It is of course desirable to make the opening as near the anus as possible, for if the artificial anus be established in the small intestines, so that the fæces are discharged before they reach the colon, the patient is imperfectly nourished, and sinks sooner or later. In Mr. Clement's case, where the aperture was made near the caput coli, the patient survived about three years, and then died. The body, when opened, was found to be remarkably attenuated, and he (the President) believed the patient died from inanition. The processes carried on in the colon are essential to the maintenance of health. These facts lead to the conclusion, that the artificial opening made in the left groin is to be preferred, whenever it can be practised. When the obstruction is higher up, there is a sufficient number of facts to show that the opening in the right groin may be made with safety, and an artificial anus may be established even in the small intestines, if all the circumstances be first fully explained to the patient, and he be made aware that the success of the operation will not prolong his life considerably. The objection to the operation in the loins is the disposition of the parts to contract, which is often very great. He (the President) had seen this in one case himself; but the other circumstances that had been mentioned were sufficient to warrant its performance. The statistics of these operations show that they may be adopted with safety.

Mr. De Morgan mentioned a simple means of diagnosis adopted by his colleague, Mr. Moore, at the Middlesex Hospital, in a case of obstruction. The abdomen in that case was very tympanitic. The long tube was passed up the bowel to a certain distance, and an injection thrown up. The patient being then turned round on his side, the stethoscope being at the same time applied to the abdomen, the intestine on the right side lost its tympanitic condition, and became dull, the fluid being at the same time heard to traverse its calibre. This led to the conclusion, that the large intestine was not the seat of the obstruction; and the examination of the body after death showed that strangulation of the small intestine had been caused by an encircling band. He (Mr. de Morgan) thought this plan of diagnosis, although a very simple one, was worth adoption in similar cases.(a)

Mr. Macilwain considered that the operation in these cases should always be regarded as the *anceps remedium*, and that the attention of the profession should be directed to the improvement of the previous treatment. He commented on the administration of powerful purgatives, which, he said, was requisite in some cases; in others, again, their use demanded very great care and watchfulness; while in a third set of cases, they ought not to be used at all. The power of diagnosing the seat of the obstruction by the vomiting was very much diminished by their use, as the employment of purgatives in these cases speedily excites emesis, whether the obstruction exist in the large or small intestine, and it also tends to induce tympanitis. Desault and other surgeons of European reputation, objected to their use, which they said tended to increase the quantity of secretion above the obstruction, and thus to complicate the case. He (Mr. Macilwain) recollected a case of obstruction which became much worse under the use of powerful purgatives, but in which complete relief was afforded by the passage of the long tube. A year and a half afterwards, during a similar attack, he (Mr. Macilwain) saw the patient again, in consultation with a physician and two surgeons. The operation was proposed; he desired to use the long tube again, which for some reason or other was not done, but purgatives were freely given, and the patient died a few days afterwards. In the case of a lady in the country who had powerful and violent purgatives on account of obstruction of the bowels, no examination of the rectum had been made. Afterwards an enlargement of the uterus was discovered, which pressed upon the rectum, and a little above that there was a simple stricture of the intestine, which would barely allow a finger to pass. In this case the operation was performed, but the patient died.

Mr. Cæsar Hawkins, on being called upon to reply, stated he had but little to say. The means for diagnosing the seat of obstruction was a matter of great importance, but as yet there had not been much light thrown upon it. The distension of the bowel above the obstruction was an uncertain guide. The sign mentioned by the President, of the difference in the period at which vomiting occurred, according as the seat of the obstruction was in the large or small intestine, was much more valuable; but it was not invariable, as it may exist early in stricture of the large intestine, as in his own case, or it may be excited by powerful purgatives.

(a) Some time ago, at a meeting of this Society, Mr. Dunn, of Norfolk-street, described a case of congenital imperforate anus in an infant, on whom he operated unsuccessfully, according to the process recommended by Amussat. The calibre of the colon was not larger than that of a goose-quill.—*Rep.*

(a) Mr. Moore's plan is by no means a novelty: it has been tried in similar cases previously.—*Rep.*

MEDICAL SOCIETY OF LONDON.

Dr. MURPHY, President, in the Chair.

ON IDIOCY—ITS CAUSES AND TREATMENT.

Dr. Forbes Winslow introduced his paper on this subject by observing, that if he were asked to specify the feature which most pre-eminently distinguished, rendered memorable and glorious the eventful epoch in which they lived, he would, without hesitation, point to the noble efforts which philanthropists have of late years been making to rescue a large section of their common family from the worse than Cimmerian darkness with which they have been enshrouded by a wise but inscrutable Providence. The attempts made to educate the idiot, to elevate him from the grovelling level of the brute to that position in the scale of created intelligence to which he has an inherent and natural right; the effort to restore to his form the partially obliterated stamp of Deity; the holy effort to rouse to activity faculties hitherto latent; to restore to society and to communion with their God these apparently lost and ruined minds, demanded their warmest eulogies. Eternal honours rest upon the heads of those engaged in the accomplishment of this, the most stupendous of human efforts. They watched with emotions of intense interest and delight the endeavours made by the devotees of science in the remote and classic regions of ancient Greece and Rome, to rescue from the bowels of the earth some little relic of architectural or artistic genius, which rendered famous in song and story the brightest periods of the world's history: and when they viewed the pillar, or the statue, or the chiselled monument of precious skill which for centuries had lain hidden in the bowels of the earth, placed either in a gallery devoted to works of art, or erected in one of our public thoroughfares, the admiration of all who have any pretension to taste and cultivated intellect, their delight was expressed in language which admitted of no misconstruction. If the beauty of the material form,—if the pillar, the statue, the coin, only made valuable to their eyes by its association with the stirring events of times long passed, and with men distinguished as historians, philosophers, orators, statesmen,

and poets, so intensely awakened their feelings of delight, reverence, and awe, how much more ought the restoration of a lost mind to a state of social and intellectual enjoyment,—the sight of the idiot standing erect, asserting his birthright and claiming brotherhood, to call from them expressions of gratitude and admiration,—admiration at the result of human patience and industry, and gratitude to that Being who had so signally blessed the efforts of those engaged in this holy and Christian undertaking. It was a cheering sight of the times, amid the convulsions which surrounded them, and the attention necessarily devoted to topics of a purely social and political character, to witness the efforts of a pure philanthropy, at home and abroad, to educate and protect those who, in all the earlier and ruder period of our history, would have been trampled under foot, and left to perish. After entering into a short historical account of the various efforts which have been made in France, Switzerland, Prussia, America, and England, since the time of M. Itard, to educate the idiot, Dr. Winslow claimed for one of his own countrymen the distinguished merit of having demonstrated the practicability of educating the idiot, one year at least before the great experiment was tried at the Bicêtre. He referred to an article published by Dr. R. Poole on this subject, which was published in 1827 in the *Encyclopædia Edinensis*. He (Dr. Winslow) was the more anxious to point this out to the profession, because he thought they were disposed, from a mistaken, but nevertheless an honourable and generous feeling, to attribute to their friend across the Channel the distinction of having solely originated this noble effort of Christian charity. Dr. Winslow then referred to the three institutions existing in England for the education of idiots, viz., the one at Bath, the one at Colchester, and that at Highgate, in all of which satisfactory progress has been made in the mental development of idiots, even in cases presenting the most unpromising physical and mental features. After referring to the statistics of these and of other institutions, clearly and conclusively establishing the educability of the idiot, Dr. Winslow said, that idiocy was to be viewed more in the light of a "deficiency" or "condition" than as a disease. He considered it to be a congenital defect in the manifestation of the mind, arising from some arrest in the development of, or irregularity in, the organisation of the brain. It was always associated with malformation of the cranium. After pointing out the distinction between fatuity, imbecility, and idiocy, Dr. Winslow observed, that idiots acted from instinctive impulse, instead of the intelligent adaptation of means to an end. Idiocy in its worst forms approximated more to the condition of the animal. Like the animal, the idiot's powers of instinct were often more wonderful than the manifestations of a higher order of intelligence. Dr. Winslow considered the subject susceptible of three divisions.—1. Congenital or connate idiocy. 2. Acquired idiocy. 3. Idiocy, the result of accidental causes. In England and Wales there were 7433 idiots; in Ireland, 3674 accommodated, and 1116 unaccommodated idiots; but the Parliamentary returns from which these statistics were derived could not altogether be relied upon. After referring to the existence of a vast amount of undetected idiocy in this country, and the influence of local circumstances in determining the amount of idiocy in Norway, Switzerland, and Scotland, Dr. Winslow considered at length,—1st, the anatomical; 2ndly, the physiological; and, 3rdly, the psychological characters of idiocy. In speaking of the size and character of the cranium, he observed, that no particular form could be relied upon in this affection, except that of extreme diminutiveness, as a certain criterion. After quoting the opinions of Gall, Foville, Parchappe, etc., in relation to this point, Dr. Winslow directed the attention of the Society to the altered condition of the tables of the cranium, to the character of the brain itself in some cases of idiocy. He referred particularly to the change in the complexity and depth of the cerebral convolutions, so often discovered in the brain of idiots after death. He also spoke of the diminution in the size of the lateral ventricles, and the absence, in some cases, of the corpus callosum and of other commissures. Dr. Winslow also commented, at some length, upon the chemical pathology of the brain in idiocy, and in certain depressed conditions of cerebral power, particularly drawing attention to the laws regulating the organization of nervous matter, and to the absence of phosphoric and other important chemical agents, in certain morbid states of the brain and nervous system. After alluding to the extraordinary amount of instinctive power exhibited in some cases of idiocy, and its absence in other forms of the same disease, and reciting some remarkable instances of partial talent among idiots, Dr. Winslow directed attention to the peculiar habits of this class, particularly to the disgusting one of self-abuse so commonly prevalent. Out of 389 idiots, 204 were known to be addicted to masturbation. Cases were recorded of even little children indulging in this destructive habit. Nineteen young boys were countenanced in this filthy habit by intemperate and degraded parents. After speaking of the complication of idiocy, Dr. Winslow entered at length upon its psychological and physiological character. He spoke in reference to the causes of idiocy. He said, that the most important cause was a low condition of the mental and physical organization of one or both parents. The great mass of idiots were said to spring from an unhealthy stock, and have either been the children of idiotic parents, or of those of vitiated organizations, of the scrofulous diathesis, or of intemperate habits; 300 idiots were ascertained to have been the children of drunkards. Idiocy was frequently the result of conception taking place when one or both parents were in a state of intoxication. Dr. Winslow referred to the effect of intermarriages of near relatives, etc., and to the influence of the mind of the mother, as well as of that of the father, upon the condition of the offspring. He considered the fact established, that the mental condition of the male parent played an important part in the future cerebral development of the child. He saw no valid reason why the seminal secretion should not undergo important modifications as the result of intense emotion of the mind. It was therefore important to watch the state of the mind at the period of sexual intercourse. Hesiod exhorted his friends not to commence the work of procreation after having returned from funerals, lest the mournful idea should be transmitted to their offspring.

> "Nor seek to taste her beauties when you part
> From the sad funeral, with a heavy heart;
> But when from joyous feasts you come all gay."

After dwelling upon other facts clearly demonstrating the influence of the mind of both parents in regulating the cerebral organisation, and the future physical and mental health of their offspring, Dr. Winslow considered that part of the subject relating to acquired idiocy, as well as to idiocy the result of accidental circumstances. He then pointed out the peculiar nature of *cretinism*, and the characteristic difference between this affection, idiocy, dementia, etc. He considered the prognosis in idiocy favourable, where there existed partial manifestations of the intellect, and the dimensions of the cranium were of a normal standard. The prognosis was unfavourable when idiocy was complicated with paralysis, epilepsy, rachitis, and great defects in the anterior cerebro-cranial development. The following points in relation to the education of the idiot were considered *seriatim*:— 1. Hygienic. 2. Medical. 3. Intellectual and Moral. 4. Educational. He dwelt upon the importance of educating and giving tonicity to the muscular system, of attending to the general health, of the benefit of systematic bathing, of the shower bath, of gymnastic exercises, of galvanism, of the exhibition of the different preparations of iron and other tonics, and of phosphorus, cod-liver oil, etc., in the treatment of idiocy. The faculties most requiring development are those of imitation, taste, touch, smell, and hearing. The object of the primary education of the idiot is, to convey to the mind a conception of things, before instructing the idiot in words, teaching him the use of his hands and legs, giving development to his senses. Dr. Winslow then dwelt at some length on some other sources of mental ill health and idiocy. He considered there existed in this country unexplored sources of terrible mental disease, producing the most frightful states of moral idiocy, among those classes of the population which form the bone and sinews of the people. He pointed to the lamentable amount of ignorance—of uneducated brain, prevalent in this country, and to the condition of the poor factory children, sunk into the most gross habits of debauchery and demoralisation. "We can form," concluded Dr. Winslow, "but a shadowy conception of the extent of the moral, mental, and physical deterioration which is slowly and insidiously, but surely, sapping the rising population of England. I have witnessed it with my own eyes; others have done so; and we have upon record the most frightful accounts of the brutalising effect of the system upon the minds and morals of those exposed to its influence. I have no wish to exaggerate the evil, or to paint in glowing colours a picture which has no existence except in my own warm imagination; but in speaking on the subject of idiocy, I feel it my duty to suggest, that we have no reason to wander to the dark and rugged mountains of Switzerland, or to the deep and damp gorges of the Alps, to find sources of idiocy and other forms of early mental impairment and imbecility. We have only to look at home, in order to see many agents at work in producing the same unhappy results; causes operating within the range of our own vision. It is in the gin palace, the factory, the mine, the nursery, the dark haunts of vice and depravity, the bad and ignorantly conducted school, the neglect of early mental training and discipline, that we must seek for some of the principal sources of idiocy, moral degeneracy, and mental decay. Hundreds who issue from these emporiums of vice and intemperance which exist in all large cities, return home only to propagate to their

unfortunate offspring diseased bodies, and stunted and weak minds. The factories constitute hot-beds of vice and crime in their most revolting features. He had heard them described by Government inspectors, and had witnessed with his own eyes scenes too disgusting to detail In these moral pest-houses, where the passions are forced into a state of premature development, the young of both sexes are taught habits destructive to the health of body and mind Need we be surprised if the future working classes of this country should degenerate physically and mentally, when we consider the stock from which they are to spring. Men devoted large sums of money, much time and energy, to the improvement of the breed of sheep, dogs, and horses, etc., but were totally regardless of the laws regulating the transmission of hereditary mental qualities, and the organization and future health of the human race. They daily witnessed, even among those fully cognisant of the evil, marriages contracted by persons related by the closest ties of consanguinity, and intermarriages among small communities. They saw scrofulous men marrying women with the same diathesis; others, if not actually insane, yet bordering upon the confines of mental disease, forming alliances with families in which a strong hereditary predisposition to insanity is known to exist. What may, he asked, be expected from such monstrous violations of great and important physiological laws? (The above forms but a sketch of Dr. Winslow's elaborate paper.)

In the discussion that followed, Dr. Webster, Mr. Harrison, Mr. Dendy, Mr. Pilcher, Dr. Davey, Dr. Daniels, and others took part.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 12th inst.:—

Blatherwick, Charles, Titchfield, Hants.
Dixon, Charles, Australia.
Edney, William, London.
Griffin, Richard, Buenos Ayres.
Hemingway, Edward Vavaseur, Leeds.
Lane, Henry Wedgnock-park, Warwick.
Lawrence, Benjamin Richardson, Chedder, Somerset.
Ramskill, Josiah, Leeds.
Salter, John Reynolds, Exeter.

At the same meeting of the Court, Mr. Julian Watson Bradshaw passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date May 5, 1845.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 11, 1852:—

Beverley, Edward Parry, Margate.
Davies, David Daniel, Carmarthen.
Lovegrove, George Hymeneus, Gloucester.
Stretton, Arthur.

Pathological Society of London.—Dr. Devenish and Mr. Brodhurst were elected members of this Society on the 16th instant.

Military Appointments.—4th Foot: Acting Assistant-Surgeon William Boyd, to be Assistant-Surgeon, vice Gamble, promoted. 24th Foot: Surgeon Joseph Burke, from the 40th Foot, to be surgeon, vice Smith, appointed to the staff. 40th Foot: Staff-Surgeon, 2nd class, Adolphus Collings, M.D., to be Surgeon, vice Burke, appointed to the 24th Foot. 42nd Foot: Staff-Surgeon, 2nd class, John Gillepsie Wood, M.D., to be Surgeon, vice M'Gregor, promoted. 97th Foot: Acting Assistant-Surgeon Theodore Gordon Bone, M.D., to be Assistant-Surgeon, vice Ewing, promoted. Hospital Staff: Inspector-General of Hospitals, with local rank, James French, M.D., C.B., to be Inspector-General of Hospitals. Deputy Inspector-General of Hospitals, Walter Henry, to be Inspector-General of Hospitals, with local rank, vice French, who retires upon half-pay. Staff-Surgeon of 1st class, John Dempster, M.D., to be Deputy Inspector-General of Hospitals, vice Henry, promoted. Staff-Surgeon of the 2nd class, James Connell, to be Staff-Surgeon of the 1st class, vice Dempster, promoted. Assistant-Surgeon John Ewing, from the 97th Foot, to be Staff-Surgeon of the 2nd class, vice Connell, promoted. Inspector-General of Hospitals, with local rank, Alexander Stewart, M.D., to be Inspector-General of Hospitals. Deputy Inspector-General of Hospitals William Munro, to be Inspector-General of Hospitals, with local rank, vice Stewart, who retires upon half-pay. Staff-Surgeon of 1st class William Bell, M.D., to be Deputy Inspector of Hospitals, vice Munro. Surgeon James M'Gregor, from 42nd Foot, to be Staff-Surgeon of the 1st class, vice Bell, promoted. Surgeon John Stewart Smith, M.D., from the 24th Foot, to be Staff-Surgeon of the 2nd class, vice Collings, appointed to the 40th Foot. Assistant-Surgeon Rich Gamble, M.D., from the 4th Foot, to be Staff Surgeon of the 2nd class, vice Wood, appointed to the 42nd Foot. Acting Assistant-Surgeon Alexander Robertson, M.D., to be Assistant-Surgeon to the forces, vice F. M. Tweddell, who retires upon half-pay. Edward Arthur Brien, gent., to be Assistant-Surgeon to the forces.

Naval Appointments.—Assistant-surgeons Archibald Sibbald, M.D., (1841,) to the Pluto, steam-vessel, at Woolwich, for service on the west coast of Africa station; Henry Eales, (1849,) from the Penelope steam-frigate, on the west coast of Africa station, to the Rodney, 90, at Portsmouth, vice Rickards; Surgeon Charles A. Anderson, M.D., (1849,) to be Surgeon-superindent of the Lord Dalhousie convict-ship; Assistant-surgeon William Duirs, (1843,) recently serving in the Southampton, 50, on the south-east coast of America station, to the Rodney, 90, at Portsmouth; Acting Assistant-surgeons W. H. Baxter, (1852,) to the Victory, flag-ship at Portsmouth; Richard Evans, (1851,) to the Blenheim, 60, screw steam guard-ship at Portsmouth.

Naval News, and Appointments at Malta.—Dr. Denny, assistant-surgeon, is coming home in medical charge of the Hercules. Dr. Trousdell, of the Shearwater, has been sent sick to Malta Hospital. Mr. Pearce, assistant-surgeon of the Modeste, has been appointed to the Shearwater, vice Trousdell. All the supernumerary lieutenants on this station are ordered to be sent home; they will take passage in the Hercules. Their occupation of the cabins to which the assistant-surgeons are entitled is the reason assigned for this measure.

Medical Appointments and Vacancies.—Dr. Emery, who accompanied the late Emperor to Elba, has been appointed physician to the French Senate. At the Ardwick and Ancoats Dispensary a resident house-surgeon is wanted; a British surgical diploma or the licence of the Society of Apothecaries, will qualify. Election on the 9th of April. Salary, first year, 60*l.*; second ditto, 70*l.* Mr. Wright has been appointed surgeon to the Whitehaven and West Cumberland Infirmary. Dr. M'Carthy has been appointed for the Kenmare district, at a salary of 100*l.* a-year; Dr. Taylor, for the Kilgarvan district, at 80*l.*; and Dr. Doran, for the Sneem district, at 60*l.*

Lord Cowley, the British Ambassador in France, has appointed Dr. Olliffe Physician to the British Embassy. Dr. Olliffe enjoys a great reputation among the English residents in Paris, and stands well with the Profession generally.

The President of the French Republic has nominated the following Inspectors-General of Superior Instruction:—For Sciences—M. Dumas, of the Academy of Sciences, member of the Senate, Professor at the Faculty of Sciences and at the Faculty of Medicine, Paris; M. Le Verrier, of the Academy of Sciences, member of the Senate, Professor of the Faculty of Sciences, Paris, member of the Bureau of Longitudes; M. Brongniart, of the Academy of Sciences, and Professor at the Museum of Natural History. For Medicine—M. Bérard, of the National Academy of Medicine, senior member of the Faculty of Medicine of Paris. Their salaries are fixed at 12,000 francs (480*l.*) These gentlemen are also nominated members of the Superior Council, of which M. Dumas is the Vice-President.

University of Cambridge.—A grace has passed the Senate-house, to dispense with the grace of February 17, 1829, so far as it relates to the practice of pharmacy and midwifery, in behalf of G. M. Humphrey, of Downing College, who wishes to proceed to the degree of bachelor of medicine. It was *non-placeted* in the Black-hood house, but carried by 28 against 6. It was offered to the Senate, with the concurrence of the Regius Professor of Physic and of the Professor of Anatomy, on the ground that G. M. Humphrey has for some years delivered a course of lectures on the principles and practice of surgery, accessible to members of the University, and, further, that he has assisted the Professor of Anatomy by acting as Demonstrator for the last five years. The letters of the Regius Professor of Physic, and of the Professor of Anatomy, expressing their concurrence and the grounds for it, were laid upon the registrar's table. Mr. Humphrey is, we believe, one of the surgeons to Addenbrooke Hospital, the infirmary of the University.

University of Cambridge.—Tests for the Honour Triposes.—The Syndicate, appointed Feb. 18, 1852, to consider whether any or what additional tests should be adopted for ascer-

taining that the candidates for the several honour triposes in each year are of the proper standing, etc., report that students in medicine are of the proper standing to be candidates for honours in the moral sciences tripos and in the natural sciences tripos among the commencing bachelors in the fourth Lent term, after the completion of their first term of residence; and among the middle bachelors in the fifth Lent term, after the completion of their first term of residence, provided that they shall have kept nine terms before such fourth Lent term.

Queen's University in Ireland. — Ceremony of Conferring Degrees.—At twelve o'clock, on the 5th inst., a meeting of the Senate of the Queen's University in Ireland was held in the Council-chamber, Dublin Castle; when, in the absence of Lord Clarendon, the Chancellor of the University, the chair was taken by the Vice-Chancellor, the Right Hon. M. Brady (ex-Lord Chancellor of Ireland). The Vice-Chancellor was attired in his academic robes. Among other members of the Senate present were the Right Hon. Francis Blackburne, Lord High Chancellor of Ireland; Sir Robert Kane, President of Queen's College, Cork; D. J. Corrigan, M.D., &c. The Right Hon. the Vice-Chancellor, in addressing the assembly, said, he regretted the absence of Lord Clarendon, who might have satisfied himself on this occasion that his exertions in the cause of the colleges and of the Queen's University had not been without fruit. He referred in terms of high praise to the exertions of the Presidents in their respective spheres of duty, and hoped that towards the close of the year the public at large would have ample evidence of the success of the colleges, and that in the examinations then to be held in the faculty of arts, large numbers of students from each College would distingnish themselves in every branch. On the present occasion the number of degrees to be conferred was but small, owing to the short period which had elapsed since the opening of the Colleges, and few students having been enabled to complete the necessary curriculum. The Vice-Chancellor then called on each of the following gentlemen, addressing them respectively in these words: "In virtue of my authority as Vice-Chancellor of this University, I confer upon you the degree of Doctor of Medicine,"—Robert John Black, James Dixon, Charles S. Leicester, John Moore, James Washington Murphy, Thomas Paine, Thomas Kennedy Wheeler. Diplomas in agriculture were next presented to John Perrot Hincks, Thomas O'Hara, and Thomas Skilling. The Vice-Chancellor then presented exhibitions of the specified amounts to the following gentlemen He said, "that they had been awarded as additional testimony to their merits by the Court of Examiners." Dr. James Dixon, 30*l.*; Dr. J. Moore, 30*l.*; Mr. Thomas O'Hara, 20*l.*; Mr. Thomas Skilling, 20*l.* The successful candidates having received the congratulations of the Senate, the proceedings then terminated. We perceive, with great satisfaction, that the cause of liberal education is steadily progressing in Ireland, and we make no doubt that the Queen's University in Ireland will, before long, surmount the irrational opposition raised against it.

Royal College of Surgeons in Ireland.—Sugden Prize Essay.—It cannot be unknown to the majority of our readers, that during the period of Lord St. Leonard's tenure of office in Ireland as Lord Chancellor, a sum of money was liberally appropriated by His Lordship to the founding of a prize to be contested for under certain specified conditions. The adjudication of this prize for the present year is vested with the Council of the Royal College of Surgeons in Ireland, and the subject chosen is that of "Hypochondriacal Insanity, its Pathology and Treatment." Essays with fictitious signatures or mottoes, and accompanied by sealed letter with the author's name, to be lodged at the College on or before the 1st October, 1852.

The Medical Benevolent College.—The third list of contributors to this excellent Institution is to appear on the 3rd of April. We are anxious that at the above date the Medical Profession generally should show their appreciation of so praiseworthy an effort; and we believe that the time specified will mark a crisis in our history, so far as benevolent endeavours are concerned, at once creditable to the Profession, and fraught with the greatest blessings to their posterity. On the 28th instant, the Rev. H. Mackenzie is to preach on behalf of the funds, at St. Martin's-in-the-Fields.

St. Thomas's Hospital.—A meeting of the students of this hospital was held on Saturday last to consider the propriety of presenting Mr. Rainey, the able demonstrator of anatomy and microscopist, with some mark of their respect for his professional talent and private worth. Mr. Alfred Carpenter, the senior house-surgeon, was called to the chair; and it was unanimously resolved, "That a testimonial be presented to Mr. Rainey, as a mark of approbation of the ability, kindness, and attention displayed by him as demonstrator of anatomy. That a Committee be formed for the purpose of receiving subscriptions, and to consider the best means of carrying out the wishes of the subscribers." At the close of the meeting a large sum was subscribed by those present. The list will remain open to enable other gentlemen who have profited by Mr. Rainey's instructions to embrace the opportunity thus afforded them of expressing their gratitude for the benefits received from him during the time of their studentship at St. Thomas's Hospital.

Dublin Hospitals.—There has just been printed, by order of the House of Commons, a return showing the number of persons relieved in each of the last three years in the Dublin hospitals. In Dr. Steevens' Hospital 7325 were admitted during that time, and 6252 were cured. In the Lying-in Hospital the number was 13,843.

The City Court of Sewers, in their report of receipts and expenditure for the year from Michaelmas, 1850, to Michaelmas, 1851, set down the sum of 1453*l* 8s. 6d. as expended for sanitary works, out of a gross total of 74,977*l*. 11s. 4d. This, of course, is independent of street-cleansing, making and repairing sewers, widening streets, etc., the amounts for which would give a tolerable item of expense.

The Asylum for Idiots.—The fourth anniversary festival was held lately, the Earl of Carlisle in the chair, the attendance being unusually good, and the subscription-list very extensive. Mr. Peto made a donation of 1000*l.*; and nearly 4000*l.* altogether was subscribed in the course of the evening. About 10,000*l* are required for a building fund, and it is expected that the whole amount necessary will be obtained. The reports were considered very satisfactory.

The late Sir C. Bell.—"At Hailebury he received intelligence of the sudden death of Sir Charles Bell, which took place in England on the 29th of April. 'This is a sad blow, the loss of good, kind-hearted, happy Charlie Bell It met me here on my arrival. I do not know whether poor George or his wife is most to be pitied, but the loss will be terrible and irreparable to both. Except George himself, I have not so old and intimate a friend left, and it may be a kind of a comfort to think that I cannot have many more such losses to bear. We were familiar from boyhood, and, though much separated, from residence and occupation, never had a notion of alienation, or a cessation of that cordiality and reliance on each other's affections, which is also a comfort even now." (To me, the biographer, Lord Cockburn, 8th May, 1842.) Jeffrey afterwards wrote the following epitaph, which is now on a tablet in the parish church of Hallow, near Worcester, where Sir Charles was buried:—'Sacred to the memory of Sir Charles Bell, who, after unfolding, with unrivalled sagacity, patience, and success, the wonderful structure of our mortal bodies, esteemed lightly of his greatest discoveries, except only as they tended to impress himself and others with a deeper sense of the infinite wisdom and ineffable goodness of the Almighty Creator. He was born at Edinburgh in 1774, and died in England, 29th of April, 1842.'"—*From the Life of Lord Jeffrey, by Lord Cockburn, recently published.*

Parish of St. Anne, Soho.—Our number for January 17th contained a report, sent us by a correspondent, stating, that at a Vestry-meeting of the parish, held on the 22nd December, resolutions had been passed, addressed to the Registrar-General and the Poor-law Commissioners, and signed by the Rector, as chairman, on behalf of the meeting, prejudicially affecting the professional character of Mr. Jones, the medical officer of the parish. We therefore deem it our duty to insert the following Memorial, signed by the Rector, 35 past officers of the parish, and 170 of the principal ratepayers, which has been recently forwarded to the Poor-law Board:—"To the Honourable the Commissioners of the Poor-law Board. Gentlemen,—As inhabitants of the parish of St. Anne, Westminster, we beg respectfully to address your honourable Board in relation to a Memorial which has been presented to you (as the voice of the parish of St. Anne, Westminster, in vestry assembled) respecting the medical officer of the parish, Mr Henry Derviche Jones. We beg to assure your honourable Board, that we do not consider the Memorial (officially signed by the Chairman on behalf of the vestry-meeting) as in any way expressing the voice of the parish; and though we cannot presume to trouble your honourable Board with the local reasons for this assertion, (obvious to all acquainted with St. Anne's parish,) we think we may with propriety state our own conviction upon the subject, and which many of us do with the more confidence, as being the result of our acquaintance, as past officers and residents, with Mr. Jones's professional character for a long period of years. We beg, therefore, to assure your honourable Board, that we consider Mr. Jones fully

competent to perform the duties of medical officer to the parish and union; and we believe him hitherto to have discharged those duties humanely and advantageously, and that nothing has ever come to our knowledge affording any reasonable ground for charging him with any deficiency of diligence or fidelity."

Prosecution under the Lunacy Act.—Amelia Brown, widow, was lately tried at Stafford, for having received into her house, in the parish of Aldridge, more than two lunaties, without having previously obtained a licence for that purpose. She pleaded guilty. The proceeding was taken under the 8th and 9th Vic., ch. c. s. 44. The statute required, that before any one received into his house even one lunatic for purposes of profit, he should obtain a licence for so doing; the consequence being, that the house would be subject to supervision by medical officers, and proper treatment and attention secured to the unfortunate inmates. This, the counsel for the prosecution stated, was a most useful and excellent statute, and it was desirable it should be generally known, that, under its provisions, any one who received into his house without a previous licence, more than two lunaties, was guilty of a misdemesnour. The defendant was called upon to enter into recognisances, to come up for judgment when called upon, it being understood, that, if she ceased to offend the law, she would not be proceeded against further.

Progress of Epidemics.—The cholera, it is hoped, is beginning to disappear from the country districts of Jamaica; but a similar anticipation has been so often expressed, and has been so often belied by facts, that we fear but little reliance can be placed on the present report. At Savannah-la-Mar, where it was formerly prevalent and raged dreadfully, it has entirely disappeared, not a single case having occurred up to the time when the advices were closed. In Georgetown, British Guiana, several fatal cases of yellow fever had occurred, but the violence of the endemic had abated about the date of the latest accounts. The attention of the Legislature in that colony has been much engaged latterly—but not before it was necessary—respecting the introduction of efficient sanitary measures for the preservation of the public health.

The Anatomical Lecture.—Messrs. Ackermann, of the Strand, have just published an admirable engraving in mezzotint, by Cornilliet, of Amsterdam, of this celebrated master-piece of Rembrandt. It contains portraits of D. P. Nicolaas Tulp, Jacob Block, Hartman Hartmansz, Adrian Slabbraan, Jacob dee Witt, Mathys Kalkoen, Jacob Koolveld, and Frans van Loenen, after the celebrated picture of Rembrandt in the Gallery at the Hague. Professor Tulp is represented demonstrating to his pupils. It is a highly interesting work, and we recommend it to those of our readers who delight in the Fine Arts.

The Asbestos Filter.—Messrs. Oxley's Asbestos filter appears to be constructed on highly scientific principles, and to be as near perfection as such an instrument can be. It is highly recommended by Dr. Alfred Taylor and Mr. Aikin—a guarantee quite sufficient for its utility and adaptation to dietetic purposes.

Mortality Notabilia.—The deaths registered in London in the week ending last Saturday exhibit a great increase on previous weeks. In the last week of February they were 1069, in the first week of March 1128, and last week they rose to 1232. That the unusual coldness of the weather has principally produced this result may be inferred from the excess of deaths at advanced ages, and from the increased number caused by diseases of the organs of respiration. The mean temperature in the first week of March fell to 36°, and in the following week was 40°, which is still below the average. The mean daily temperature was, with two exceptions, below the average, from Feb. 18 to the end of last week. In the ten weeks, corresponding to last week, of the years 1842-51, the average number of deaths was 1034, which, if raised in proportion to increase of population, becomes 1137. The present return, therefore, shows an amount greater than the corrected average by 95. The deaths at three periods of life have been:—From birth to 15 years, 521; at 15 and under 60, 437; at 60 years and upwards, 274.

Nuisances.—We quote the following letter, addressed to the Registrar-General, by Mr. Murray, the Registrar.—Sub-district of Hackney-road, Bethnal green: "Though no death has occurred which can be clearly traced to the pestiferous exhalations arising from Bunker's-pond, I am induced to call your attention to the present state of that neighbourhood. The pond is nearly surrounded by houses, thickly populated; for some years it received the contents of a sewer, now diverted, and has been for a long period the receptacle of all kinds of filth. This has accumulated in masses, become putrid, and presents a broad, shallow, and stagnant surface to the action of the atmosphere. The consequence is, that a most oppressive and offensive smell taints the air, and extends beyond the Hackney-road, a distance of more than a hundred yards, and is perceptible to persons passing by. The noisome smell pervades the houses of all who are obliged to reside within its reach, and must be highly injurious to health. I am informed by a medical practitioner of high standing, that five persons in one family have, within the last few days, been ill with typhoid fever attributable to this cause, and some of them are still in danger; that three cases of fever, in the immediate vicinity of the pond, are borne on the books of the Adelaide Dispensary, and the approaching warm weather will sensibly aggravate its morbid influence, unless some remedial measures are adopted."—In Whitechapel North, at 4, Buck's-row, on 4th March, a coach-painter, aged 37 years, died of "malarious fever (14 days), typhus (9 days), congestion of the brain." The medical attendant in this case remarks, that "Buck's-row, John-street, Queen Anne-street, and the neighbouring courts, are never free from typhus and other malignant and contagious diseases. A horrible nuisance exists on this spot, a bone-boiling house, the putrid exhalations and disgusting stench arising from which are occasionally intolerable."

Age.—Last week the deaths of 39 men and 66 women were registered at the age of 70 years and under 80; of 14 men and 28 women at the age of 80 years and under 90; and those of 2 men and 5 women at 90 years and upwards.

Premature Birth.—In Camden-town, the son of a mercantile clerk died, 23½ hours after birth. He was born prematurely, between fifth and sixth month; weight, 1lb. 8½oz. It is added, that the case is "singular, the child was of perfect development, and performed all the functions of nature during its short existence."

Miscellaneous.—At 3, Garden-street, Mile-end, on 4th March, a ship-caulker, aged 52 years, died of "carbuncle (4 weeks), bronchitis (5 days)." A woman, aged 37 years, died of "neuralgia (8 days), inflammation of left arm (4 days), metastasis to brain (26 hours)." A seaman, aged 23 years, died of "exhaustion from scurvy and diarrhœa, from want of proper and sufficient food at sea; manslaughter against the captain of the vessel." *Post-mortem*, inquest. At Mile-end Workhouse, on 9th March, a chemical manufacturer, aged 48 years, died a "natural death, accelerated by want and privation before he came to the workhouse." Inquest. On 24th February, a girl, aged 4 years, died from "eating peas of indigestible quality." On 7th March, a gentleman, aged 56 years, died of "colic, brought on in an individual afflicted with old standing intestinal disease, by eating improper food (3 days);" and on the same day, a girl, aged one month, died of "convulsions, produced by indigestible food (ill a few hours.)" The son of a coachman, aged 9 months, died of "teething, bronchitis (11 days), exhaustion by loss of blood from the bite of a leech (4 days)."

The births of 841 boys and 806 girls, in all 1647 children, were registered last week in London. The average number in seven corresponding weeks of 1845-51, was 1449.

DEATHS *in the Metropolis for the week ending Saturday, March* 13, 1852.

Causes of Death.	March 13.				Sum of Ten Weeks.
	0	15	60	All Ages.	
All Causes	521	437	274	1232	10342
Specified Causes	517	437	273	1227	10297
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	141	44	12	197	1879
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	34	28	68	531
3. Tubercular Diseases	32	144	11	237	1911
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	59	32	38	129	1261
5. Diseases of the Heart and Blood-vessels	3	35	21	59	355
6. Diseases of the Lungs and of the other Organs of Respiration ...	104	76	71	251	1999
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	29	18	14	61	602
8. Diseases of the Kidneys, &c. ...	4	6	4	14	114
9. Childbirth, Diseases of the Uterus	...	5	...	5	97
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	1	4	6	67
11. Diseases of the Skin, Cellular Tissue, &c.	...	1	...	1	12
12. Malformations	1	1	...	2	29
13. Premature Birth and Debility ...	24	2	...	26	228
14. Atrophy	20	0	1	21	178
15. Age	...	...	58	58	628
16. Sudden	3	7	4	14	98
17. Violence, Privation, Cold, and Intemperance	40	31	12	83	278
Causes not Specified	4	...	1	5	45

TO CORRESPONDENTS.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you allow me a niche in your valuable columns, to call the attention of my fellows, the general practitioners of this vast city,—the *minus docti* (as we are esteemed to be) of the Profession, to the list of officers just published by you, as elected at the anniversary meeting of the Royal Medical and Chirurgical Society, in all which I do not find the name of one general practitioner in medicine and surgery. This fact, coupled with the protracted existence of a by-law, that the general practitioners shall never be more than one-third the existing number of fellows of the Society, shows a decided desire on the part of the magnates to put down that class of medical men as much as possible, and even to ignore their existence; but that the state of their funds will not allow them to do altogether. I do not wish to be invidious, and therefore shall not name any of the officers in particular; but, surely, Sir, any one, on looking over the list of the fellows, could select some half-dozen of my co-mates in degradation equal, notwithstanding that degradation, in reputation and talent to not a few of their officers. I have always understood that the Royal Medical and Chirurgical Society was instituted and maintained for the advancement of the medical sciences; but it would seem from the conduct of the managers, that one of its principal objects is to widen the breach, and make the distinction the greater between the "pures" and those who, according to Mr. Green, are fit only for the ordinary exigencies of practice, and not for any sudden emergency requiring thought, skill, and intellect. I am, &c.

A GENERAL PRACTITIONER OF TWENTY YEARS' STANDING, AND ONE NOT ASHAMED OF HIS POSITION.

[To the Editor of the Medical Times and Gazette.]

SIR,—I observed in your paper of last Saturday, an answer to the query of "Humilitas,"—whose letter, however, I fancy was indited with other feelings than those implied by the signature, since, otherwise, his name would have been added,—wherein you give it as your opinion, that an M.B. of London is not entitled to the appellation of Doctor, while an M.B. of Oxford or Cambridge is, simply because, that in the last-named Universities no further examination is required for the M.D. degree.

Now, Sir, surely it cannot affect the question whether such is the case or no, since, if a Bachelor of Medicine of one University is a "Doctor" by courtesy, it appears necessarily to follow that an M.B. of another University is so likewise.

Moreover, regarding the further examination necessary for the M.D. degree of the London University, it is, I believe, generally acknowledged by all to be the least severe of the three that candidates for such degrees have to undergo: consisting, as it does, in the rudiments of logic, &c., and in medicine—so that any candidate who has passed the previous, need not despair of undergoing with impunity the final, ordeal.

It is also the general custom of the medical journals to style M.B s of London "Doctors;" and not only so, but others also, whose interest and duty it is to address the numerous circulars which every medical man weekly has, adopt the same phraseology in most cases.

Excuse me for trespassing so far upon your valuable space, but fancying that "Humilitas" intended by his signature to convey a correction to the M.B.s of London for feeling any honest pride or satisfaction in possessing such a degree, I wished to assure him that I, for one, should never have been at the expense of time, trouble, and pocket to secure such, had I conceived it possible that it would ever cause me shame.

I am, &c.

Fazeley. RICHARD NEALE, M.B. Lond.

[To the Editor of the Medical Times and Gazette.]

SIR,—The letter of an "M.R.C.S. and L.S.A." in your last Number, states the case very fairly with regard to Hall and College men. "An M.R.C.S.," says he "can now practise as a general practitioner, as well without the L.S.A. as with it. His diploma gave him a status in society, but the L.S.A. receives a title that he is ashamed of owning, for who puts 'Apothecary' on his brass plate?" Now, in these words is contained the very reason why "the majority of men now commencing practice have not the licence." Is it likely men will take the trouble to pass the Hall when "they can enter the Army, Navy, or East India Company's Service without it, and the Unions no longer insist upon it?" and "why should they pay for a diploma, too, that confers no benefit on its possessor, and does not exalt his position?" As to the College diploma not being any "test for a man's fitness for general practice," the observation is simply absurd, as no holder of it, unless he be a thorough quack, and heedless as to the chance of his ignorance being daily exposed by fellow practitioners, would think of commencing, or could practice properly, without a knowledge of those subjects required by the Hall. True, he may not be so well up in chemistry and botany as a pass man must be, but I am confident the majority of College men now practising could stand a stiff examination on every other subject, and perhaps on those also,—if not, a month or twos' work would soon put them right. The Hall examination is certainly a good one *per se*, and would be embraced by very many, were it not for "the odious title of 'Apothecary;'" but, as regards the so called "classical examination," what is it? A schoolboy's knowledge of the Latin grammar, and a facility in construing two of the easiest works ever selected as pass-books—namely, Gregory and Celsus,—the former a book any moderate construer could read straight off, and the latter to be got up in some two or three weeks. Why not let there be a sort of combined examination of both Hall and College, with a good classical examination, so that all practitioners might enjoy one and the same title, and all this bickering about qualifications and rights be put an end to? Were such an examination to be instituted, five out of every six of the present M.R.C.S.s would gladly and eagerly avail themselves of it; but if the Hall is to continue alone, it must be with an amended Charter and a better name. I am, &c. A SUBSCRIBER.

[To the Editor of the Medical Times and Gazette.]

SIR,—In No. LXXXV., New Series, folio 173, of your valuable Paper, I find a remark relative to "discoloration of the hair after ringworm of the scalp,"—a question is put by Dr. Crisp, would the use of the burnt butter account for the whiteness of the hair? Now I am acquainted with a case similar in every respect,—no burnt butter, however, was applied,—but the hair presents a round white patch.

Sandgate. I am, &c. JOHN LOVE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you be kind enough to inform us if a gentleman holding M.B. (Bachelor of Medicine) from Aberdeen or St. Andrews can legally practise in England as a medical man,—give certificates of death, &c.?

Would he be qualified to give evidence in a court of law, or make *post-mortem* examinations, and give evidence thereon to a Coroner's jury?

As M.B., would he come under the denomination of a qualified man, if the new Bill passes? By answering these questions in your next paper you will greatly oblige TWO CONSTANT READERS AND SUBSCRIBERS.

[The degree of B.M. gives no legal right to practise.]

A Subscriber.—A note addressed to Dr. Guy, King's College, will meet with attention, and elicit a reply.

Dr. Smith, of Cheltenham.—It is with great difficulty we find room for original communications. It is quite out of our power to republish letters from the columns of other journals. We have already adverted to the subject of the Income-tax, and may again.

WE must again entreat our numerous Correspondents to append titles to their papers, and that on the first page of their communications, and not, as often occurs, in a private note. We have now in our boxes several papers which we cannot publish, because the names of the writers are unknown to us. Our correspondence is becoming so extensive, that we are compelled, both in justice to ourselves and the gentlemen who address the Profession through our columns, to lay down rules from which we can not depart.

[To the Editor of the Medical Times and Gazette.]

SIR,—May I be permitted to suggest to your Correspondent "Humilitas," that he should compare the length and severity of the examination for the degree of M.B. in the University of London, comprising, as it does, fifteen days' written and oral examination, with that which the "Doctor" of St. Andrews must undergo; and that he should then state which of the two is the more entitled to an appellation of honour. I am, &c

INGENUUS.

[To the Editor of the Medical Times and Gazette.]

SIR, — Will you kindly inform me through the medium of your columns, to what extent an M.R.C.S. Eng. may practice without the Hall qualification, for, from the remarks of your correspondent "Justitia," one would imagine that the College diploma does not confer the right of any man to practise. Apologizing for troubling you,

I am, &c. "NOVICE."

P.S. I have occasionally addressed a note, when requiring information, to the Editor of the "Lancet," but he has never had the courtesy to notice it, I was a subscriber to that paper at the time.

[An M.R.C.S. cannot legally charge for the medicines he may supply to his patient.]

WE are compelled to delay the publication of the half of Dr. Johnson's lecture, on account of its length.

Dr. Carr, of Rusholme—The paper alluded to has not reached us.

Tyro.—We suppose that Tyro, if not a very young man, must be a very little man. May your shadow grow longer!

R.C.—It is not beyond the course of events, and therefore not surprising, if such obstinate cases of amenorrhœa should sometimes *turn out* a "crying" evil.

Querist.—We suspect your name should be written *Quer-ist*. Gray, according to his friend Walpole, was "a little man, of very ungainly appearance."

COMMUNICATIONS have been received from—

Mr. PAGE, of Newmarket—CASE OF PARALYSIS of the BLADDER; J. L.; Messrs. BRADSHAW and BLACKLOCK, of Manchester; Dr. BUCKNILL, of the Devon County Asylum; Mr. VOSE SOLOMON, of Birmingham; Mr. SPENCER BATE, of Swansea; Mr. PRETTY, of Mornington-road; Dr. SNOW BECK, of Langham-place—On the MEANING of the TERM "ULCERATION," as at present APPLIED TO UTERINE DISEASES; Dr. SCHOLFIELD JOHNSON, of Camberwell New-road—On the FINAL CAUSE OF MENSTRUATION; Dr. SMITH, Portland-house, Cheltenham; Mr. MICHELL CLARKE, of the Bristol General Hospital—CASE OF RUPTURED URETHRA; Mr. PAVY—PARISIAN HOSPITAL REPORT; Dr. BACHHOFFNER, of the Royal Polytechnic Institution; Mr. SHAW, of Henrietta-street, Cavendish-square; A CONSTANT SUBSCRIBER; Dr. GAIRDNER, of Edinburgh—On HOMŒOPATHIC STATISTICS; INGENUS; Mr. L. S. BEALE, of King's College Hospital; Dr. OLDHAM, of Guy's Hospital and Devonshire-square—CASES OF FEMALES who had ATTAINED the AGE of 48 WITHOUT MENSTRUATING; Mr. WILDE, of Dublin—PRACTICAL OBSERVATIONS on DISEASES of the EAR; Mr. BROKE GALLOWAY, of the Royal Regiment of Artillery—ILLUSTRATIONS of UNHEALTHY INFLAMMATION; M.R.C.S.; Dr. BOYD, of the Somerset County Asylum; Mr. LOVE, of Sandgate; Mr. BERNARD RICE, of Littlemore, near Oxford—CASE of CONGENITAL DISPLACEMENT of the KIDNEY; Dr. W. COOKE, of Trinity-square—CASE of CYSTO-SARCOMA; Mr. R. SMITH—On the STATISTICS of MORTALITY at PUBLIC INSTITUTIONS; Dr. J. B. THOMPSON, of Suffolk-place—On the SIMATA CEDRON; Mr. HENRY SMITH, of Caroline-street—HOSPITAL REPORT: FRACTURE of the PELVIS and RUPTURE of the BLADDER; Dr. JENNER, of University College and Albany-street—REPLY to some STATEMENTS of Dr. DUNDAS; Mr. HARVEY B. HOLL, of the York County Hospital—CASE of LEUCOCYTHEMIA; Dr. MAYNE, of Leeds; Dr. NEALE, of Fazeley; A GENERAL PRACTITIONER; A SUBSCRIBER; Mr. LAWRENCE, of University College—On the MODES of DISTINGUISHING URIC ACID CALCULI from those of URATE of AMMONIA.

Lectures on Orthopædic Surgery.—

Mr. CHANCE begs to inform the Gentlemen attending his LECTURES on ORTHOPÆDIC SURGERY at the CITY ORTHOPÆDIC HOSPITAL, HATTON-GARDEN, that the remaining Lectures of the Course will be delivered on each succeeding SATURDAY, at *Half-past Five p.m. precisely*, INSTEAD of Four, as previously advertised. The alteration in the time above-specified, has been made at the especial request of several of the gentlemen present at the Introductory Lecture on Saturday last, in order that they may be able to attend the lectures of Professor Owen at the Royal College of Surgeons.—Members of the Medical Profession admitted on presenting their cards; or a Ticket of Admission and a Synopsis of the Course may be obtained by applying to Mr. Chance at the Hospital, or at 59, Old Broad-street.

Synopsis of the First Part of Mr. CHANCE'S LECTURES

ON THE

NATURE, CAUSES, VARIETY, AND TREATMENT

OF

BODILY DEFORMITIES.

LECTURE I.

Saturday, March 13, 1852.

The form of the human body and of all vertebrate animals dependent on the internal skeleton—Consideration of the modes in which the natural skeleton, as a whole, influences the external form of the body—Definition of Deformity, as understood in Surgery—Division of the subject, in accordance with the definition, into four primary groups, viz., 1st, the period of accession; 2ndly, the system operated upon by the inducing cause; 3rdly, the nature of the deviation produced; and, 4thly, the nature of the inducing cause itself—Considerations of the 1st group, and its subdivisions. Original and Acquired Deformities—Consideration of the 2nd group, and its subdivision into Deformities arising from—first, errors in the Osseous System; secondly, in the Muscular System; thirdly, in the Skin; fourthly, in the Fasciæ; fifthly, in the Ligaments—Consideration of the 3rd group, and its subdivision, viz.,—first, Deformities consisting of an alteration in the number of the bones (var. produced); second, upon an alteration in the structure and shape of the bones (var. produced); third, upon the alteration of the relative position of the bones (var. produced); and, fourth, upon simple impeded motion in the part (var. produced).

LECTURE II.

Saturday, March 20.

Consideration of the 4th primary group, viz., the nature of the inducing cause—Arrangement of the causes inducing *Congenital Deformities* according to the period at which they exert their influence: first, on the Ovum; secondly, on the Embryo; and, thirdly, on the Fœtus—Consideration of the first cause acting upon the Ovum—viz., Error in the primary impulse of development—Effect of impregnation on the ovum—Requisites for development in the class Aves—Proof of the occasional existence of error in this class—Ditto in other classes of the inferior animals—Ditto in the vegetable kingdom—Ditto in Man—Consideration of the second cause acting upon the ovum—viz., hereditary influence—Proofs of the existence of such a cause—Kinds of deformity which result therefrom—Inferences to be drawn from the occurrence of deformity from the action of this cause on the father's side—Ditto on the mother's.

LECTURE III.

Saturday, March 27.

Consideration of the causes assigned as capable of exerting a baneful influence on the Embryo—first, Mental Emotion, as fright, &c.—Opinion of medical men in support of the current belief in the efficacy of such a cause—Reported cases—Arguments in opposition to such a belief—Consideration of the second assigned cause—viz., Arrest of Development—Many deformities only the persistence of some of the perfectly normal conditions of the embryo—Consideration of the causes which are capable of exerting an influence on the Embryo or Fœtus from without, *i. e.*, Mechanically: first, Ligature of the Funis (examples); secondly, Thread like bands (examples); thirdly, adhesion of the membranes, or of the placenta to the embryo or fœtus.

LECTURE IV.

Saturday, April 3.

Consideration of the 4th reputed cause of Mechanical Interference—viz., "Position in Utero"—Division of the inquiry into two heads: first, to ascertain whether the uterus, under any circumstances, can exercise a degree of positive constriction upon the fœtus; secondly, *admitting* the existence of such a state of constriction, to inquire whether or not that state would of itself exercise sufficient influence to produce deformity—Consideration of the last cause of Congenital Deformity—viz., Disease,

LECTURES V. & VI.

Saturday, April 10 and 17.

Consideration of the nature of the exciting causes of *Acquired Deformities*—Causes acting directly upon the osseous framework: 1, Rickets; 2, Scrofula—Causes acting upon the muscles and surrounding tissues, but only indirectly affecting the skeleton—Muscular action, how exercised—Sir C. Bell's experiments—Impediments to muscular action; Error in exciting cause: first, excess or spasm; second, deficiency or paralysis—Error in muscle itself or in the surrounding tissues: first, Inflammation; second, Rheumatism; third, Disuse; fourth, Abscess; fifth, Sloughing; sixth, Wounds—Mechanical impediments to muscular action: first, contraction of skin; second, Contraction of Fasciæ; third, ditto of Ligaments—Deficient support: first, Relaxation of Ligaments; second, ditto of Fasciæ.

The Second Part of the Course, including the consideration of the peculiarities of the individual deformities and their appropriate treatment, will be given in the Summer Session.

University of London.—Notice is

hereby given, that on WEDNESDAY, APRIL 21 NEXT, the Senate will proceed to elect Examiners in the following departments:—

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One in the German Language	20	Rev. A. Walbaum.
Two in the Hebrew Text of the Old Testament, the Greek Text of the New Testament, and Scripture History	50	Rev. W. Drake, M.A. Rev. Prof. Gotch, M.A.

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One in Midwifery and the Diseases of Women and Infants	100	Edward Rigby, Esq., M.D.
One in Materia Medica and Pharmacy	100	Jon. Pereira, Esq., M.D., F.R.S.

The present Examiners are eligible, and intend to offer themselves for re-election.

Candidates must announce their names to the Registrar on or before April 13.

By order of the Senate,

Somerset-house, March 16, 1852. R. W. ROTHMAN, Registrar.

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2nd. To negotiate the Transfer of Practices, Partnerships, and the Providing of Assistants and Pupils.

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ORIGINAL LECTURES.

LECTURES
ON
DIGESTION, RESPIRATION, AND SECRETION,
GIVEN AT
The Royal Institution,
To the Members, and to the Pupils of St. George's Hospital.

By H. BENCE JONES, M.D., F.R.S.
Physician to St. George's Hospital.

ON THE ALKALINE AND EARTHY PHOSPHATES(a).

In my last two lectures, gentlemen, I brought before you two out of the three principal kinds of calculi which occur in the human body. I mentioned to you more especially, in the lecture before the last, the uric calculi, which can be destroyed by heat, become red with nitric acid, and are soluble in alkalies. I noticed in my last lecture the second great class of calculi, consisting of oxalate of lime, which is most remarkable for the change which it undergoes when heated. I passed over without further notice two or three different substances which were mentioned in the table of calculi as cystine, fibrin, and carbonate of lime, because they occur very rarely in the urine, and, unlike the urates, the oxalates, and the phosphates, they are not excreted when the health is perfect, or very slightly impaired. I now come to the third class of calculi, of which you see here a magnificent specimen, consisting of the earthy phosphates. They form white calculi, which resist the action of heat, and are thus distinguished from the red or brown calculi, which, for the most part, are composed of uric acid and oxalate of lime. I have here a beautiful specimen, contrasting the colours of the different kinds of calculus. The red centre is uric acid; the black circle around that is oxalate of lime; and the white outside is the phosphatic calculus. My object now is to enter a little more into detail as to the nature of this latter calculus, to trace the variations that occur in the phosphates which are thrown out of the body, and to determine the causes which lead to the formation of phosphatic calculi. It is necessary that I should give you distinct ideas as to the composition of the different phosphates which occur in the urine; for, unless you recognise the difference between the alkaline and the earthy phosphates, you will fail to understand this or the following lecture.

The earthy phosphates of which this calculus consists are the phosphate of lime and the phosphate of ammonia and magnesia; but there are other phosphates, as important as these, which are also found in the urine; these are the phosphates of soda and the phosphates of potash.

I shall commence this lecture with a few words on phosphates in general, and I shall first mention the phosphates of soda.

In these bottles you see three specimens of different phosphates of soda: one is the common or ordinary phosphate of soda, as it occurs in commerce, and is given in medicine; the second, which is more rarely met with, is the bi-phosphate of soda; and the third, the sub-phosphate of soda. My object is to make clear to you the distinction between these phosphates. The first great distinction between them is their re-action upon test paper. If I take the minutest quantity of bi-phosphate of soda and dissolve it in water (and it dissolves most readily with heat), I find the solution has a decidedly acid re-action. The common phosphate dissolved in water has no such action, but if tested with red litmus paper instead of blue paper, it will be found to have a decided alkaline re-action; and the re-action of the sub-phosphate of soda is still more alkaline, being, indeed, very highly alkaline. (Experiments.)

Having shown you these most manifest re-actions, we will turn to the difference in the composition of these phosphates. Their composition is represented in my diagram.

Composition of the Phosphates.

Common phosphate of soda	PO_5	$2\,NaO$	HO	$+24\,HO$
Acid phosphate of soda	PO_5	NaO	$2\,HO$	$+2\,HO$
Alkaline phosphate of soda	PO_5	$3\,NaO$		$+24\,HO$
Phosphate of ammonia and magnesia	PO_5	$2\,MgO$	NH^4O	$+14\,HO$
Gelatinous phosphate of lime	PO_5	$3\,CaO$		
Crystalline phosphate of lime	PO_5	$2\,CaO$	HO	$+3\,HO$
Bibasic phosphate of soda	PO_5	$2\,NaO$		$+10\,HO$
Monobasic phosphate of soda.....	PO_5	NaO		

The view of the property of phosphoric acid which was first enunciated by Professor Graham, (though some doubts have lately arisen regarding it,) is still by far the simplest explanation that I can give you. He considers that it is the property of phosphoric acid to combine, not with one equivalent only of a base, but with three equivalents. For example, it does not unite with one equivalent of soda, or one equivalent of potash, or of lime, or of magnesia, but with three equivalents of soda or potash. Hence it has been called a tribasic acid. Thus phosphoric acid can take up three equivalents of soda, or of any other base, and combine with them; and Professor Graham in his admirable researches, which have thrown so much light on the composition of other salts, found that phosphoric acid combined with water as a base,—in fact, that water, that is, oxide of hydrogen, acted as a base as much as oxide of sodium. He found that water produced the same effect in combination with phosphoric acid as did the other more alkaline substances which we are more apt to consider as much more basic. Thus the sub-phosphate of soda consists of one equivalent of phosphoric acid combined with three equivalents of soda. Its composition when crystallised is represented in the table by $PO_5\ 3\ NaO + 24\ HO$. In the common phosphate of soda, one equivalent of phosphoric acid has combined with two equivalents of soda and one equivalent of water—the one equivalent of water playing the part of a base, and making up the three equivalents with which phosphoric acid can combine. The bi-phosphate of soda, which has an acid re-action, consists of phosphoric acid combined with only one equivalent of soda and two equivalents of water, forming the three equivalents required by the phosphoric acid. The salt which is formed when three equivalents of soda are combined with phosphoric acid cannot be regarded as a more tribasic phosphate than that which contains one equivalent of soda and two of water, because the latter phosphate has, besides the equivalent of soda, two equivalents of water, together forming the three bases necessary to combine with the phosphoric acid to form a definite compound. All these phosphates, then, are tribasic, and I have therefore placed them in the closest connexion. The difference between them is, that the number of equivalents of water in combination, playing the part of a base, is different in each. The least alkaline salt has two equivalents of water, and the most alkaline contains no water. There is water of crystallisation in all these phosphates; but that can be separated by heat, without the destruction of the compounds; and it is not necessary to the composition of the phosphates.

But there are other phosphates which I must mention; one of them forms one of the ingredients of the calculus which you see before you; it is known as phosphate of ammonia and magnesia. Its composition is represented by the formula $PO_5\ 2\ MgO\ NH_4\ O + 14\ HO$. There is also phosphate of lime, which is represented as a crystalline substance, containing two equivalents of oxide of calcium, and one equivalent of water, while the gelatinous phosphate of lime differs from the crystalline in being more basic, or at least containing more fixed base; it contains no water, but has three equivalents of oxide of calcium. The one is just as much tribasic as the other, the water in the one case playing the part of a base, just as it does in the phosphates of soda.

I must explain to you what is meant by a bibasic phosphate, of which you see here a beautiful specimen. It is a phosphate in which phosphoric acid is combined, not with three, but two equivalents of a base. In the bibasic phosphate of soda also there is water crystallisation, but this water does not enter into the composition of the salt. The bibasic phosphate can be procured most readily by heating the common phosphate of soda, which, you will remember, is composed of phosphoric acid, with two equivalents of soda, and one of water. By heating this, the one equivalent of water is driven off, and the phosphoric acid no longer can combine with three equivalents of base, but with two equivalents only. If I take

(a) By some accident, this lecture, which formed the seventeenth in the series delivered by Dr. Bence Jones, was passed over in the Journal.—Ed.

a tribasic phosphate and a bibasic phosphate, and dissolve them separately in water, totally different re-actions will be produced in the two solutions. If I test the bibasic phosphate (or, as it has been called, the pyro-phosphate, from its having been subjected to heat) with nitrate of silver, it does not form that beautiful yellow precipitate which the tribasic phosphate produces. (Experiment.) If, instead of heating the common phosphate, so as to produce a bibasic phosphate, by driving off the one equivalent of water, I were to heat the alkaline phosphate, what would be the result? I might heat it for any length of time without displacing the fixed equivalent of soda; its composition would remain the same, and it would before and after it was heated give a yellow precipitate with nitrate of silver. If, however, I take the tribasic phosphate which has the acid re-action, I can drive off its two equivalents of water, and thus convert it into a monobasic phosphate, containing one equivalent of phosphoric acid, and one equivalent of oxide of sodium. The monobasic and the bibasic phosphates, then, are formed by exposing the different tribasic phosphates of soda to a high heat. That high temperature, as far as my knowledge and judgment go, is never produced in the human body, so that these bibasic and monobasic phosphates never occur there. It is important to know how they are formed out of the body, but they are not proved to be capable of occurring in the human body. The three phosphates of soda which do occur in the body, are all, as I said, tribasic—one being as much so as the other: they have different re-actions on test paper, but this arises from the quantity of water in them being different, not because they are any of them bibasic or monobasic. The other tribasic phosphates of which I have spoken probably occur in the human body; I have not, therefore, occupied your time needlessly in endeavouring to make their composition plain to you. I shall now pass to the excretion from which these calculi are formed, showing you what phosphates exist in the urine, and can always be detected there.

For many years the earthy phosphates which form calculi,—the phosphate of lime, and the phosphate of ammonia and magnesia,—were alone mentioned in medical works; but the three alkaline phosphates of which I have spoken occur in the body in much larger quantities than the phosphates of lime or magnesia. The phosphates which form calculi make themselves apparent when the urine becomes alkaline; but the alkaline phosphates never appear, being highly soluble in water, and never being precipitated by any other substance occurring in the urine; thus they have been overlooked until late researches on the subject. The earthy phosphates, like the uric acid and the oxalate of lime, force themselves upon the notice; while the alkaline phosphates are like the sulphates,—they never form calculi. The sulphates in the urine would never be seen but for chemical tests; and so with these alkaline phosphates; but for chemical tests we should never know of their existence in the urine. When the urine is alkaline, you can judge by the eye whether there is much earthy phosphate present; but of the phosphates of soda you can form no judgment whatever except by a chemical analysis. If I take a portion of healthy urine, and add to it any alkali which will render the earthy phosphates insoluble, they will of course fall as precipitates. These earthy phosphates—the phosphates of lime and magnesia—are excessively soluble in all acid liquids,—almost in the very feeblest acid. If I take acid phosphate of soda, and mix with it a little phosphate of magnesia or phosphate of lime, and then heat them, the earthy phosphate will be speedily dissolved by the acid phosphate of soda; and still more speedily would it be dissolved if hydrochloric acid were added, or any other acid stronger than the acid phosphate of soda. You will remember the test for calculi consisting of phosphate of lime or phosphate of ammonia and magnesia, mentioned in a former lecture, soluble in hydrochloric acid, without effervescence, with or without heat, precipitable by alkalies. If, then, I neutralise the acid re-action of the urine, I shall get a precipitate of phosphate of lime, and phosphate of ammonia and magnesia. If I take healthy urine, and add ammonia to it, you will see the precipitate which will fall. [Experiment.] The liquid becomes cloudy. The ammonia has neutralised the acid re-action of the urine, and a precipitate is the result. It consists of the mixed earthy phosphates which were held in solution by the acid of the urine. If I were to filter this liquid, and then test it again for earthy phosphates, I should find no more present. But are there no other phosphates at all to be found there? If I added any earthy matter to the liquid, after it has been filtered, (chloride of calcium, for instance,) I should get another more distinct and more plentiful precipitate. When I precipitate the earthy phosphates, there is much less precipitate than when, after filtration, I add fresh earthy matter to throw down the rest of the phosphates. The two quantities precipitated represent the comparative quantities of earthy and of alkaline phosphates existing in the urine. If I fill a 1000 gr. bottle with urine, and precipitate it with ammonia, I shall get the earthy phophates alone. If I take a 500 gr. bottle, (which in this case is more convenient, as the precipitate is so large,) and precipitate the urine it contains with an earthy salt, such as chloride of calcium or magnesium, and also with ammonia, I shall get both the earthy and the alkaline phosphates precipitated together. [Experiments.] Then by deducting half the amount of the first precipitate from that of the other, I clearly arrive at the comparative quantity of each in the urine. It is in this way that the numbers given in the following Table have been ascertained:—

Amount of Earthy Phosphates and Alkaline Phosphates.

	Earthy Phosphates.	Alkaline Phosphates.	Urine.
Before food ..	0·40gr ..	7·56gr..	sp. gr. 1028
After ,, ..	1·45 ..	5·77 ..	,, 1030
3rd Day, Vegetable Food.			
Before food ..	0·37 ..	8·19 ..	,, 1028
After ,, ..	1·86 ..	5·56 ..	,, 1032
3rd Day, Animal Food.			
Before food ..	0·48 ..	5·06 ..	,, 1025
After ,, ..	0·81 ..	4·31 ..	,, 1025

I deemed it important to determine whether the earthy phosphates, apart from the alkaline phosphates, did not undergo peculiar variations of their own, and to know what were these variations, on which, perhaps, the formation or rapid increase of the phosphatic calculi might depend. By precipitating the urine with ammonia alone, the variations in the earthy phosphates were determined; and these are represented in the table. I found that before food urine, with a specific gravity of 1028, contained 0·40 gr. of earthy phosphate in every 1000 grains of urine; but after food the amount was very much increased, being 1·45 gr. per 1000 gr. of urine; the specific gravity being increased to 1030. This was the result of many experiments made in the way I have mentioned. I also ascertained the influence of different kinds of food. With vegetable food, the third day there was 0·37 gr. of earthy phosphate in 1000 grs. of the urine before food, nearly the same as with mixed diet; but after food the quantity was more than on mixed diet, being 1·86 grs. per 1000 grs. of urine. With animal food, on the third day, there was 0·48 grs. before food; and after food 1·81 grs. per 1000 grs. of urine, not so high as with vegetable food. The result, then, shows that food, whether animal or vegetable, distinctly increases the amount of the earthy phosphates in the urine. After animal food the amount does not appear to rise so high as after vegetable food. There is no doubt, from these numbers, that the earthy phosphates are distinctly increased by food, and consequently the rapidity of the formation of a phosphatic calculus is increased by the same cause. Having determined the variations in the earthy phosphates in health, and with different diets, I went on to determine the effect of different diseases on the amount of earthy phosphates in the urine; and it was with this object that the whole of the investigation of the variations in health was undertaken. I soon found, however, that I could draw no conclusions from such experiments, for the food had a much greater influence than the nature of the disease. I was thence led to inquire whether the influence of disease was more manifest in the variations of the alkaline and earthy phosphates together than in the variations of the earthy phosphates alone. I soon found that the earthy phosphates in the urine were present in much smaller quantities than the alkaline phosphates; and that conclusive results could only be obtained by determining the amount of the alkaline as well as of the earthy phosphate. I found that every 1000 grs. of urine, containing before food 0·40 grs. earthy phosphate, contained no less than 7·56 grs. alkaline phosphate—18 times as much alkaline as earthy phosphate. After food, the earthy phosphate amounted to 1·45 grs., and the alkaline to 5·77 gr. per 1000 grs. urine. So with vegetable food only. After living three days on vege-

table food, the quantity of alkaline phosphate was greater than when a mixed diet was taken; and it was also higher after vegetable than after animal diet. The alkaline phosphates, however, as you will observe, are not increased immediately after food, as the earthy phosphates are; on the contrary, they are less after than before food, in consequence of the earthy phosphates being increased at the expense of the alkaline phosphates. The variations of the earthy phosphates do not correspond to the variations of the alkaline phosphates, but only to the quantity of lime and magnesia which passes out by the urine at any time; for if any earthy salt is given as medicine,—a little chloride of calcium or sulphate of magnesia, for instance,—I find the quantity of earthy phosphates distinctly increased by it.

The following table shows you, that, when no chloride of calcium was taken, the quantity of earthy phosphates was 0·36 grs. per 1000 grs. of urine; but after a dose of chloride of calcium (there being no interference from food), the amount rose to 1·08 grs. per 1000 grs. of urine. With a small dose of sulphate of magnesia (40 grs.) the earthy phosphates rose to ·90 grs. per 1000 grs. of urine; and with a larger dose (120 grs.) they amounted to 2·99 grs. per 1000 grs. of urine.

Effect of Chloride of Calcium and Sulphate of Magnesia on the Variations of the Earthy Phosphates per 1000 *grs. Urine.*

		Sp. Gr.
38 grs. Chloride of Calcium before food ..	1·08 grs.	1022
No Chloride of Calcium	0·36	1027
40 grs. Sulphate of Magnesia	0·90	1029
120 „ „	2·99	1027

Thus, the variations of the earthy phosphates are dependent on the variations in the amount of the earthy matter passing through the system. The quantity of lime and of magnesia going out by the urine is represented by the amount of precipitate obtained on the addition of ammonia to the urine. If I add a little more lime or magnesia, either by taking it as a medicine, or by pouring the solution into the urine after it has passed out of the body, the quantity of earthy phosphate may be increased at pleasure until no more alkaline phosphate remains. The knowledge of the variations of the lime and magnesia may be important, but such knowledge is totally different from that of the variations of the phosphates in the urine. If, then, you desire to trace the diseases in which an excess of the phosphates appears in the urine, it is absolutely necessary not only that the earthy phosphates in the urine should be precipitated by ammonia, but that some earthy salt should be added at the same time to precipitate the alkaline phosphates. I began my experiments with chloride of calcium; it would have been better to have commenced and continued with sulphate of magnesia, but as I used chloride of calcium first, I thought it advisable to continue it, so that there might be no variations arising from the form of the experiment.(a) I precipitated the phosphates in the urine, then with chloride of calcium and pure ammonia, and thus the numbers were obtained which I brought before you in the third lecture on respiration. The effects of diet, exercise, and medicines, on the variations of the phosphates are detailed in the "Philosophical Transactions" for 1845, 1847, and 1850. The variations which disease produced upon these phosphates I have already mentioned in the third lecture on respiration. It appeared that the amount of phosphates present was decidedly increased in diseases in which oxidation was going on in that part of the body which contains most phosphorus. In the brain, for instance, which contains sulphur in its albumen, and phosphorus in its fatty matter, when acute inflammation occurred, the phosphates and sulphates in the urine were greatly increased. The phosphates also were increased in cases of delirium tremens, examples of which have already been brought before you. I speak more particularly of the alkaline phosphates than of the earthy phosphates, these last occurring in such quantities as to be comparatively of much less importance than the former. The earthy phosphates are important only because they may form phosphatic calculi; and why they form calculi it will be my object to show you in my next lecture. What I wish to impress upon you now is, that the true phosphatic diathesis—that is, the occurrence of an excess of alkaline and earthy phosphates in the urine—may not make itself apparent to the eye. The alkaline phosphates may be present in an inordinate excess, and as in the sulphuric diathesis the sulphates may be immensely increased, and yet the eye may know nothing of the excess, so in the phosphatic diathesis it requires, as I have said, that chloride of calcium or sulphate of magnesia should be added with pure ammonia, and then the total amount of phosphates becomes apparent.

The earthy phosphates, which alone form the phosphatic calculi, are precipitated, as I shall show in my next lecture, solely because the urine becomes alkaline. The formation of this kind of calculus, I repeat, depends upon the alkalescence of the urine, and not on the presence of an excess of earthy phosphates. But the true phosphatic diathesis is that in which the alkaline and earthy phosphates occur in inordinate excess in the urine, and this excess has no relation whatever to alkalescence of the urine; so far from it, that usually when there is the greatest excess of phosphates in the urine, a highly acid re-action is observed. (a) The subject of my next lecture will be, the alkalescence of the urine.

(n) Since this lecture was given, a far more rapid and yet very accurate method of determining the total amount of phosphoric acid in the urine has been made known. A standard solution of a persalt of iron is made, which instantaneously precipitates the phosphoric acid. It is dropped from a graduated tube into a weighed quantity of urine, until the slightest excess of iron is found to be present by ferro-prussiate of potash. The quantity of the standard solution required gives the amount of phosphoric acid.

(a) If any one wishes to inquire into the origin or priority of these views, I would refer him to the "Philosophical Transactions" for 1845, and to a chapter on the Phosphatic Diathesis, published in 1842, in my book on Gravel, Calculus, and Gout.

ORIGINAL COMMUNICATIONS.

NON-MENSTRUATION.

TWO CASES OF FEMALES WHO HAD ATTAINED THE AGE OF FORTY-EIGHT WITHOUT HAVING MENSTRUATED.

By HENRY OLDHAM, M.D.

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The two following cases have been the only instances of non-menstruation which have occurred to me—the females having passed the age for menstruating. I have seen, and still see, other cases of non-menstruation in females who have not arrived at the age for menstrual decay, and are therefore not beyond the chance of menstruating.

Case 1.—Maria B. appeared among my out-patients at Guy's, March 1, 1851. Her immediate ailments were unimportant, but I was struck with her informing me that she had never menstruated. She was 48 years of age; a tall, rather masculine woman, with large, full mammæ, and a well-expanded pelvis. The upper lip was without hair, but some few hairs had grown upon her chin. She was married at 15 years of age, and her sexual desires had been natural, but she has been sterile. She had suffered occasionally from pelvic and abdominal pains, but there had been no regular menstrual or periodic uterine effort, or any supplementary flux of blood or other discharge from any mucous membrane of the body. Her general health has been good, and she has lived well—in the neighbourhood of London.

The external sexual organs were fully developed, and the pubis was abundantly covered with hair. The vagina was a deep canal, normal in shape, and healthy. The uterus was well placed, of natural weight and mobility, and the vaginal cervix well formed, but there was no os uteri; the site of the os could be felt by a slight dimpling, and by the speculum it could be seen; but it was quite impervious, and some small blood-vessels appeared to pass over it.

Case 2.—Mrs. — called at my house in January, 1852, complaining of severe pains in the loins and lower abdomen—which had harassed her for some weeks—general feebleness of health, and dyspepsia. In the course of her history it appeared that she had never menstruated; and, at her request, I admitted her, under my care, into Guy's Hospital, January 28th, 1852, when the particulars of her history were taken by my clinical clerk, Mr. Massey, from whose report I have extracted the following detail. It may be remarked, that her immediate ailments were relieved by a blister to the loins, tonic medicine, regimen, and rest; and that she has just left the hospital quite recovered. Mrs. M. is forty-eight years of age; of a light, delicate

frame; dark hair and eyes; a native of Norfolk; but a resident in London for the last twenty years; in poor, and sometimes very reduced circumstances. She has been twice married; both husbands have been healthy men, but she has been sterile, although her sexual feelings have been natural.

Both before and since marriage she has had leucorrhœa; at no time profusely; but, since marriage, it has been mucopurulent; sometimes yielded in small lumps; and has occasionally increased in quantity; but neither from the sexual organs nor any other part of the body has there been anything like a vicarious menstrual discharge.

She has the aspect, form, and sexual development of a healthy person, without the physiological defect which she has suffered, and of which she is painfully conscious. The mammary glands are developed, and are sometimes tender, and yield a lactescent fluid. The pelvis is well expanded; the pubis, labia, and external organs normally developed. The vagina is of normal size and shape, and the uterus well placed, movable, and free from any defect or disorder, either congenital or acquired. She has a light, soft hair developed on the lips, but not more than many other women; and her voice is fairly modulated.

These instances of non-menstruation are of rare occurrence. Retarded menstruation, even after the changes of puberty, have been well accomplished,—a premature menstrual decline,—long intervals of amenorrhœa, and various forms of irregular menstruation, are met with in practice; but that a woman, wanting nothing but her menstrual function, and its correlative, fecundity, should pass through life without any notable deviation from health, is calculated to excite surprise. The history of these two cases shows a normal state of uterus, (the closure of the os in one case being probably a late occurrence,) vagina, external sexual organs, mammary glands, sexual instinct, and general physical and intellectual development, and an absence, too, of any compensating discharge in place of the menstrual flow.

The perfection of the sexual organs allowed, in these cases, an unimpeded sexual intercourse; and yet the prudence, or even the propriety, of marriage, until a female has menstruated, may well be questioned. If the absence of menstruation arise from constitutional feebleness, then marriage ought to be postponed until the health be established, and with it the menstrual flux. No female, whatever age she may have attained, is constitutionally fit for marriage, in whom there has been so marked a feebleness of vital power as to have failed in the complete organic and functional evolution of the sexual system. Again, menstruation may be prohibited from organic deficiency, and its absence at the time when the changes of puberty have been fully accomplished, be the only indication of the defect; and it is not only imprudent but culpable in any one to be married under these circumstances without an examination of the sexual organs being first instituted. But the objection to marriage, in reference to the cases above detailed, is open to more doubt. There is no hindrance to sexual union, but there is an almost certain sterility; and, as the conviction of the permanence of the peculiarity and of barrenness becomes fixed in the mind of the female, it is apt to produce an abiding grief, which renders her married life distressing, while, on the part of the husband, it may lead to bitter and harsh repinings, dissatisfaction, and separation. It has fallen to my lot to witness these results, where the parties had been married six years, the wife never having menstruated, but being in good health, with a perfect state (as far as could be ascertained) of the sexual organs. I do not think that any prudent parent would allow a child to be married with the prospective hazard of her happiness being embittered by the strong prejudices of her own sex, and the possible disappointment and repugnance of her husband, or, at any rate, not without so far guarding against these evils, as to have obtained beforehand the sanction of medical authority, and the acquiescence of the husband.

It is true, that the two cases above related afford no support to this opinion; they appear to have escaped without observation, and in one of them the non-menstruation was concealed; but they do not, in my judgment, outweigh the importance or even, I would say, the obligation on the part of women to refuse marriage until menstruation be established.

Another practical point connected with these cases is their treatment. It may reasonably be expected, that the natural anxiety relative to the postponement of menstruation would induce an early appeal on the part of the patient or her friends to medical aid, and tonic and chalybeate medicines, aloetic aperients, good hygienic management, with occasional hot or mustard baths, and lumbar friction, would have been fruitlessly had recouse to. It is at a later period in the history of these cases, when all ordinary means, however skilfully applied, have failed to excite the flux, that the further treatment of these cases becomes important. It is now perfectly justifiable, especially when the prospect of marriage is present, to examine the sexual organs, with a view to ascertain if there be any structural impediment or imperfect organic development, although there may be no sign of menstrual retention. If this examination be made when the patient is on her back, not only will the integrity of the vulva, vagina, and os and cervix uteri be made out, but the hand pressing on the abdomen above, co-operating with the finger in the vagina, the size and position of the body of the uterus may be clearly defined. I do not hesitate to say, that, if this mode of examination be adopted, there will rarely be any pretext on the score of diagnosis, either in this, or for the most part in the organic diseases of the uterus, for the introduction of the uterine sound. When these organs are thus found to be in a normal state, and the general health has been and continues good, the absence of menstruation may be inferred to depend on some imperfection of the ovaria.

What that imperfection may be, which, as in these cases, allows of feminine development and sexual desire; but, without menstruation and fecundity, we have not, so far as I know, sufficient authentic pathological experience. It would be natural enough for those who implicitly believe the supposed connexion between ovulation and menstruation, to affirm that the primary error is in the failure of the maturation of the Graafian follicles and the periodical oviposit, which carries with it an abrogation of the menstrual flux; but those, who, like myself, do not think that this theory is strictly correct, must be content with a less precise pathology, and refer the imperfection generally to the ovary. If, then, it be ovarian, what are our means for exciting the flux? Clearly, our main reliance is on constitutional means,—on a steady perseverance in sustaining and invigorating the general health, with exercise on horse-back, (if attainable,) hot-baths, etc., and electro-magnetism. If, by these means, a menstrual nisus be excited, then an effort to establish the flow may be made by leeching the vulva, groins, thighs, or mammæ, electric shocks through the pelvis, hot stimulating hip-baths, liniments, etc.; among which, I may notice, that the castor-oil rubbed over the loins, has been tried by me among my out-patients at Guy's with an encouraging success. If, however, in spite of these local remedies, aided by approved emmenagogue medicines, menstruation does not come on, is it better to leave off active treatment, attending only to the general health, hoping and encouraging the patient that nature, in her own time, may yet establish the flow, or to have recourse to the application of the solid nitrate of silver, or the injection of a solution of nitrate of silver within the cavity of the uterus; or the use of mechanical excitants, as the uterine stem-supporter, or the galvanic stem placed and retained within the womb, and exercising its influence for good or evil for months together. It must be borne in mind, with reference to extreme remedies in these cases, that there is little or no opposition to encounter on the part of the patients themselves; they will bear anything, and, without affectation, it may be said, that their remarkable credulity and ready acquiescence in whatever may be proposed with the professed object of making them menstruate and bear children, ought to be felt as a strong appeal to the honour of the practitioner, that his judgment should be exercised with unusual care, to prevent such expedients being adopted as may endanger life. That the uterus will sometimes tolerate these powerful direct stimulants applied to its cavity, there can be no reasonable doubt, from the testimony of those who employ them, although I am disposed to believe, that in many cases the stem slips down into the cervix and the upper part of the vagina, in which position its power for harm is greatly abated. If, however, it remains within the cavity, it may and does frequently set up great irritation, which may pass into metro-peritonitis, and cause death. As a local irritant, it may congest the whole body of the uterus, and, with it, the mucous membrane and the cervix glands, and bring on a pseudo-menstrual discharge of blood and mucus; but whether a true menstrual act can be established by it, or whether it is

equal in its emmenagogue powers to the medicines in ordinary use, or the local derivatives which may be used often with success, and always without harm, is very questionable. My own opinion is decidedly against the employment of these means in any form of amenorrhœa; and I think in the cases now under consideration, that it is far better to limit the female to the adoption of general hygienic measures, than to employ measures which may do irreparable harm and a very doubtful amount of good.

PRACTICAL OBSERVATIONS ON DISEASES OF THE EAR.

WITH RECORDS OF CASES TREATED AT ST. MARK'S HOSPITAL, DUBLIN.

By W. R. WILDE, Esq., F.R.C.S., Etc.

(Continued from page 250, Vol. III., New Series.)

No. 15.—THICKENING AND COLLAPSE OF THE MEMBRANA TYMPANI ON BOTH SIDES.—CHARACTER AND VARIETIES OF TINNITUS AURIUM.

M. K., female, 46, married. Has suffered from deafness accompanied by noise in her ears, occasional headaches, and general nervousness for the last ten years Cannot hear the ticking of the watch, though pressed against the ears, on either side. Her disease crept on gradually; is made worse on catching cold. She has not experienced pain in the ears, and has no hereditary tendency to deafness. The tongue is clean; throat normal; pulse natural; digestive functions healthy; the voice, however, is harsh, husky, and inharmonious, showing that she has been deaf a long time.

What have we learned from the subjective symptoms just detailed of the actual cause, proximate or remote, of the deafness in this case? Absolutely nothing. Its early history is obscure, and the symptoms described are common to many affections of the ear. By her ordinary medical attendant, if she was in a rank of life to have one, her disease would be set down as a case of "nervous deafness," because it has been of such long standing, has resisted, or is now unamenable to treatment, and because this poor woman has, from her loss of hearing, and the noise in her ears, become "so nervous." Her treatment, she says, has consisted in being syringed by a doctor, who, finding the remedy ineffectual, then recommended her "not to be quacking lest she might lose the little hearing she had;" in pouring "drops" which he saw advertised in a newspaper into her ears every night for three weeks; in using brandy and salt, which a "charitable lady" recommended to her as an infallible remedy when that nostrum was in vogue; in inserting a piece of rusty bacon into her ears at the suggestion of an old woman; and, lastly, in having tobacco smoke blown into her ear by a travelling aurist, about three years ago, which caused her to faint, and rendered her weak and debilitated for several days after. Since then, having lost confidence in treatment, she has not ventured to apply for relief.

Let us now see what is the state of the affected organ. The appearances are nearly the same on both sides; the meatus is rather smaller than natural, dry, vascular, and totally devoid of cerumen; the membrani tympani is thickened, white, and greatly collapsed, so that the process of the malleus, to which it is attached, stands out much more prominently than it ought. Owing to the irritation produced by the insertion of the speculum, several red vessels have begun to appear upon the tympanal membrane, particularly along the site of the malleus. These are not the appearances of present inflammation, but are the result of the enlargement of the vessels, caused by long-continued previous inflammatory action; and they are now rendered apparent by the slightest irritation. We constantly observe the same phenomenon in an eye which has recently suffered from internal ophthalmia. The conjunctiva and sclerotica are, to all appearance, natural; but, upon rubbing the globe with the finger, or subjecting it to any other exciting process, we reproduce the well-marked pinkish zone round the cornea which characterises inflammations of the internal tunics. This patient has not suffered pain in the ears, and the absence of this symptom is often brought up by medical men in proof of the non-inflammatory nature of the disease; but we all know now, that subacute inflammation may exist in other organs of the body—in the lungs, the eye, the liver, and the mucous and serous membranes, without the patient being sensible of pain. She cannot fully inflate the drum, but she can raise up the tympanal membrane a little, and also render it more vascular—a proof that the Eustachian tube is free. The inflammatory process has in all likelihood not been confined to the external membrane of the tympanum, but has spread over the mucous lining of that cavity, and it is more than probable that bands of adhesion exist in the middle ear, similar to those which dissection occasionally shows us between the pleura pulmonalis and pleura costalis—between the various reflections of the peritonæum, or between the back or the pupillary edge of the iris and the anterior capsule of the lens. Several years ago I described a collapsed state of the membrana tympani as a cause of deafness; (a) but various authors, principally Continental ones, have denied the existence of that affection. Since then Mr. Toynbee has by dissection demonstrated the fact of the collapse or falling inwards of the membrana tympani, and shown that it has been caused in several instances by adhesive bands, such as I have described.

As the amount of apparent disease, and the morbid changes which are manifest in this case are insufficient to account for the great loss of hearing, we must attribute the defect to an extension of the inflammation from the middle into the internal ear, affecting the vestibule and labyrinth, and possibly thickening or rendering invibratile the membrane of the fenestra rotunda. Analogy with the pathology of the eye here again assists us. In many instances of internal ophthalmia do we not observe similar phenomena, where the amount of mischief done to the sensitive apparatus is not commensurate with the evidence of disease in the external or visible mechanism; and the more delicate the organization the less is the morbid product apparent?

This woman complains of a noise in her ears—tinnitus aurium, one of the most distressing as well as the most frequent symptoms attendant upon affections of these organs. Its cause is very obscure and difficult to comprehend; its removal still more difficult to achieve. I know no symptom concerning which a more cautious prognosis should be given; it is one common to almost all, and is peculiar to none of the diseases of the ear. Like muscæ volitantes in the eye, it may exist as an isolated symptom, or it may be an attendant upon several aural diseases. It is often caused by cerebral disease; therefore we should carefully inquire whether it is felt in the head or in one or both ears; it is sometimes an accompaniment of derangement of the circulating, digestive, or uterine organs,—congestion of the brain, hæmorrhage, anemia, typhus, influenza or simple catarrh,—closure of the external meatus, obstruction of the Eustachian tube, impaction of the auditory passage with wax, a foreign body, or even a hair resting on the tympanal membrane, as well as engorgement of the lining membrane, or mucous collections in the tympanal cavity, and also nervous deafness, will all produce it. Furthermore, we may remove the original disease, give a healthy action to the affected organ, and restore its function; yet will the noise remain. It is always most felt at night when the patient lies down to rest; it is least experienced in the open air, in a crowd, or when travelling in a carriage. It seldom or never co-exists with an open tympanal membrane, and, therefore, perforation of the drum has been resorted to with effect to relieve patients of this distressing malady. In cases of complete acquired deaf muteism it is not usually present. So great is the discomfort which it gives, that persons incurably deaf, and who are quite conscious of the impossibility of restoring their hearing, will still apply to be relieved from this haunting and most distressing symptom. And therefore it is, that, in the quack advertisements, you always read of the "promise to cure ringing and noises in the ears." As you are all aware, the peculiar characters of the tinnitus, and the noises to which it is likened, are as variable as sound itself. Do these characters of the tinnitus depend upon the cause of the deafness, or the portions of the organs affected? I believe not, and I have taken some pains to investigate the subject. They are no more dependent upon the causes of the disease, nor the structures engaged, than the peculiar form which ocular spectra and motes floating

(a) See "Contributions to Aural Surgery," Part I., "The Early History of Aural Surgery, with a Nosological Chart of Diseases of the Ear," in *Dublin Journal of Medical Science* for 1844.

before the eyes are contingent upon the parts concerned in ophthalmic or cerebral diseases. No one has yet been able to arrange or classify the peculiar description of muscæ contingent upon congestion, amaurosis, choroid disease, or cataract.

I think the descriptions which patients give of the noise which they experience depend to a certain degree upon their fancy, their graphic powers of explanation, and not unfrequently upon their rank of life, or the position in which they have been placed, and the sounds with which they are most familiar: thus persons from the country or rural districts draw their similitudes from the objects and noises by which they are surrounded, as the falling and rushing of water, the singing of birds, buzzing of bees, and the waving or rustling of trees; while, on the other hand, persons living in towns or in the vicinity of machinery or manufactures, say that they hear the rolling of carriages, hammerings, and the various noises caused by steam-engines. Servants almost invariably add to their other complaints, that they suffer from "the ringing of bells" in their ears; while old woman, who are much given to tea-drinking, sum up the category of their ailments, by saying, that "all the kettles in Ireland are boiling in their ears." The tidal sound, or that which we can produce by holding a conch-shell to the ear, however, is what is most frequently complained of. Sometimes the tinnitus exists as an isolated symptom; but I have remarked, that sooner or later either aural or cerebral disease manifests itself.

Removing the cause and curing the deafness will often, but not always, relieve the patient of the tinnitus. Where it remains, relief may sometimes be got by perforation of the membrana tympani. on which I shall have occasion to speak at another time. In some cases, rubbing over the membrana tympani gently for a short time with a camel's hair-pencil, moistened with any mild ointment, will, for a while at least, remove the noise. If there is any medicine which acts specifically on tinnitus aurium, it is arnica, to the preparations of which I have elsewhere drawn attention.

Treatment holds out but little hope of amendment in the case we have been examining. The best thing that can be done is to apply a strong solution of nitrate of silver to the thickened and collapsed drum every third day for three months, and to keep up counter-irritation behind the ears by means of tartar emetic ointment.

No. 16.—ACUTE INFLAMMATION OF THE MEMBRANA TYMPANI AND EXTERNAL AUDITORY TUBE.

T. S., 46, male, a shopman, complains of deafness in *left ear*, of a fortnight's duration, accompanied by a buzzing noise and throbbing. Disease commenced late in the evening, with severe pain, which continued all night, and which, although mitigated, has never entirely ceased since, but is always most distressing at night. Upon the fifth or sixth day he perceived a "slight moisture" in his ear, but was not conscious of any sudden burst or feeling as if something had given way within his ear. The external meatus and auditory tube, as well as the surface of the membrana tympani, are coated over with a tenacious muco-ceruminous discharge, upon the removal of which the entire surface brought into view appears of a florid red, becoming pinkish and spotted with white on the face of the membrana tympani. Flakes of cuticle still adhere to the walls of the tube. The white spots on the membrana tympani appear to be patches of lymph effused on its surface; they are more of a yellow colour than the specks of cuticle on the tube. We occasionally find the whole surface of the tympanal membrane covered over with a sheet of lymph like that which lines the trachea in cases of croup. The membrana tympani is still imperforate. Cannot hear the watch even on touching.

On the *right side* the parts are healthy and the hearing good.

This is a case too manifest to be mistaken, and, from the total loss of hearing upon the left side, it is probable that the inflammatory action has extended to all the layers of the membrana tympani, and has also passed into the cavity of the middle ear. Had it commenced in the latter, the pain and attendant fever would have been greater, and, on suppuration taking place, the membrana tympani would have been ruptured, to allow the exit of the matter, and the case would now be one of internal otorrhœa, with perforation of the tympanal membrane. The treatment recommended to the patient has only aggravated his disease,—brandy and oil, laudanum, hot salt, and various stimulating applications, having been poured into the meatus. Cases of this nature are very common during the winter months, and are evidently the result of cold, the affected ear being, in almost every instance, that most exposed to the draught. Here it was the side next the shop-door which suffered, the other remaining unaffected. Travelling upon a coach, or sitting opposite a broken window, is a very frequent cause of these inflammations of the external and middle ear. I see, every Lent, several Roman Catholic clergymen labouring under inflammation of the ear, contracted while hearing confessions in places of public worship,—the ear having been applied to a small aperture in the side of the box in which they sit; and it is invariably upon the side so exposed that the inflammatory action is set up.

With respect to the case before us, local depletion, though rather late, is still applicable. Leeches should be applied round the external meatus every second or third day. The inflamed parts should be washed over with a solution of nitrate of silver, counter-irritation kept up behind the auricle by means of tartar emetic ointment, and alterative doses of mercury with bark administered internally.

No. 17.—OTORRHŒA WITH PERFORATION.—DESCRIPTION OF A NEW DIAGNOSTIC SYMPTOM.

C. E., 18, female, complains of deafness with a running from her left ear since she had scarlatina two years ago. Hearing distance three inches. A muco-purulent discharge pours out of the meatus, at the bottom of which, upon a close inspection, two small globules of air can be perceived. On introducing the speculum those globules coalesced. Their presence is a positive and unfailing evidence of an opening in the membrana tympani; indeed I have never seen an instance where this symptom was not conclusive of the fact. I was lately called to see a gentleman said to be labouring under fever. He was extremely deaf, had from the commencement complained of violent pains in his ears; he had great heat of skin, furred tongue, loss of rest, and other febrile symptoms. Upon the fifth or sixth day a purulent discharge was observed to issue from both his ears. On examination I found several globules of air mixed with the discharge, and I at once stated to the attendant what subsequently proved to be correct, that the case was one of internal otitis, in which the tympanal membranes had given way, either by rupture, ulceration, or sloughing, and thereby gave exit to the pent-up pus in the tympanal cavities. Upon removing the discharge, an aperture was found in the inferior and anterior portion of the membrana tympani, opposite the entrance of the Eustachian tube.

In the case now under examination, we have another curious phenomenon, which has not, that I am aware of, been described by authors. By keeping the eye steadily fixed on this little bright globule, we perceive that it pulsates, and that its action is synchronous with that of the heart and arteries. I have remarked this symptom in similar cases for some years past, and I have frequently pointed it out to the class. It is not an invariable symptom, and the pulsation sometimes intermits. In order to see it in perfection there ought to be but a slight coating of discharge at the bottom of the meatus, and the globule from which the light is brilliantly reflected should be opposite the opening in the membrana tympani. In all the cases in which I have remarked it, the aperture was rather small, and situated in the posterior part of the membrane. I have never seen it where the opening was very large or the membrane entirely destroyed. We can easily account for the existence of the globule itself; for so long as the Eustachian tube is free, any forced expiration, sneezing, coughing, or blowing the nose would produce it—a portion of the air thus driven through the tube becoming entangled in the thick viscid discharge through which it passes; but, unless the impulse is communicated to it by means of the general action of the arteries of the membrana tympani, it is difficult to account for the pulsation. By clearing away the discharge, we discover the truth of our diagnosis. The lining membrane of the lower portion of the meatus, as well as the external layer of the membrana tympani, is of a uniform pink colour, except at that part of the latter corresponding to the insertion of the malleus, which is whitish and prominent. Towards its upper and posterior part, we observe a circular aperture, about the size of a large pin's head, round the thickened margin of which the colour deepens in intensity. Upon desiring the patient to hold her nose, close her mouth, and then make a forced expiration, we hear a squealing noise, and we can see a quantity of thin fluid mixed with air

pumped out through the aperture. When we have any doubt respecting the existence of perforation—for sometimes the aperture is so small or valvular that we are unable to detect it, especially if the sun is not shining on the part—we should always require the patient to perform this little experiment.

In cases of perforation, the opening is, as I have already stated, generally opposite the aperture of the Eustachian tube, which would rather lead us to believe that it is caused by a burst or rupture of the membrane, owing to a sudden jet of air striking against this thin portion of it while in a state of inflammation and tension, rather than that it was produced by either sloughing or ulceration. But, in cases like the present, I am inclined to think that one or other of the latter causes produced the perforation. When a cornea is about to perish in whole or in part from sloughing, hypopyum, or penetrating ulcer, we have an opportunity of observing the process from hour to hour. It is not so, however, in cases of inflammation of the drum; we have seldom an opportunity of examining the part until the mischief has occurred. When the disease is consequent upon, or happens during, measles or scarlatina, etc., the ordinary medical attendant pays but little attention to the state of the ears, although the patient frequently complains of excruciating pains therein. He is satisfied with attending to the state of the fever and the eruption, telling the friends that the aural affection can be easily rectified after the patient's recovery. It must, however, be acknowledged, that in many instances the general symptoms of the disease are of such a threatening character, that both the physician and the friends are well satisfied if the patient escapes with life. Nevertheless, I cannot but feel, that an examination with the speculum should be made in all such cases, and means taken to relieve the aural disease by the application of a few leeches, etc. I have frequently saved eyes in patients labouring under small-pox, by employing the ordinary remedies applicable to pustules in the cornea.

In cases of inflammation of the middle ear and membrana tympani, we will generally find upon examination, that the latter is one uniform sheet of redness, without any appearance of pointing, sloughing, or ulceration; and, within a few hours after, the patient will tell us that he is relieved of his pain by something having suddenly burst in his ear, and then, upon inspection, we find a circular opening in the membrana tympani. I have seen an abscess in the layers of the membrane, and have elsewhere recorded a case of it, but that was a disease not of the cavity of the tympanum, but the drum-head alone.

I have touched the aperture in the membrana tympani with solid nitrate of silver, applied on the end of a flexible porte-caustic, which accurately covers the opening; and you perceive that it has caused a white ring round its edge. By this means I have frequently succeeded in closing holes in the membrana tympani of a much larger size, I suppose by inducing a process of thickening and contraction; but it requires time, and among the lower orders you seldom get the patients to attend sufficiently regularly to effect a cure. The girl was directed to have the ear gently syringed with warm water once a-day, and afterwards to fill up the meatus with a lotion of zinc and alum, which is to be allowed to remain there for some minutes. The right ear is natural, and there is no tinnitus on either side. The moist-cotton remedy is unnecessary and inapplicable in cases of such minute perforation as this.

In perforation of the membrana tympani, particularly if the aperture is large, the patient generally complains of some of the water getting into the throat in syringing.

Perforation may occur without inflammation in bathing or diving, or even from the act of sneezing or violently blowing the nose; and I remember seeing a gentleman, some years ago, in whom it was caused by thrusting his finger into his ear to get rid of the water which had got into the meatus while in a warm bath.

OBSERVATIONS ON THE LOCAL TREATMENT OF ULCERS OF THE LEG.

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[Continued from p. 185.]

TREATMENT OF ULCERS ON THE LEG.

The most important practical conclusions to which the premises laid down in the foregoing section lead us are, *first*, that the tendency to atony, or indolence, ought not to be set down as merely characteristic of a species of the complaint, but as its radical distinction, present in every case, as the natural result of locality, underlying, as it were, all other causes of obstinacy, constitutional and local, and still operating to retard the cure when they have been surmounted; and, *secondly*, that this disposition being traceable to over-distension of the capillaries of the sore and its subjacent tissues, the necessary consequence of the gravitation of the blood in the superficial veins during the dependent position of the lower extremity, the obvious indication to be followed is, that we must endeavour to counteract it—not alone where indolence is the prominent feature, but where it is latent, other features so far predominating as to mask its presence—by affording such assistance in *all* cases as will accelerate the flow of blood in the veins, remove the congestion of the capillaries, and keep up a circulation through them sufficiently active to enable them to carry on successfully the reparative process, as soon as all other sources of intractability have been disposed of.

The grand point to be determined is, what are the means best calculated for attaining these objects, recollecting that we are called upon, not merely to complete the cure, but to render it permanent? Upon this question, in fact, the whole treatment of ulcers on the leg may be said to hinge; since, in the plurality of cases, the tendency to atony constitutes the chief source of intractability, and there is no variety of the disease in which, sooner or later, it will not have to be encountered. To it, therefore, our first and largest share of consideration is fairly due.

1.—*Local Treatment of Indolent Ulcers, and those complicated by the presence of Varix.*——In a healthy, vigorous person, nature will, in most instances, speedily originate granulation under any form of simple dressing, if the limb be but placed in an elevated position, to take off the superincumbent pressure upon the vessels of the sore, although it seldom progresses actively unless we have recourse, at the same time, to some of those topical applications, drawn mostly from the astringent class of medicines, which excite tonic contraction of the dilated capillaries. Granulation once set on foot, if the stimulus be varied from time to time it will very commonly render the vessels capable of sustaining the natural effort until cicatrization is completed, provided the leg be kept throughout in the horizontal position. Nevertheless, under the most favourable circumstances, ulcers thus healed are very likely to break out again when the patient begins to use the limb.

But the great difficulty is to induce patients to lay up the leg entirely; first, because those who could do so are very reluctant to submit to the irksomeness and inconvenience of such a measure, so long as they retain the power of locomotion; and, secondly, because the majority of sufferers from this affection are so wholly dependent upon their bodily exertions for daily bread, that, unless they can obtain admission into the wards of an hospital, it is, in their case, totally out of the question. The number treated in hospitals, however, compared with those who are unavoidably rejected, amounts to a very small proportion of the applicants for admission, for the very sufficient reason, that the latter would, if taken in, occupy beds required for those who were labouring under more serious maladies, in which, perhaps, life itself may be at stake.

This averseness to confinement in one class of patients, and impossibility of indulging in rest in the other, coupled with the tendency to relapse even when rest had been strictly enforced, have led to the trial of other methods, founded upon a principle not only more generally applicable, but more efficient than that of rest,—support of the vessels, namely, by judicious bandaging. I allude, of course, more particularly to the modes of treating these cases recommended by Whately and Baynton, that of Baynton, especially under the improved form practised by the late Mr. Scott, of Bromley, having long superseded Whately's proceeding. In fact, of all the various plans of treating chronic ulcers of the leg, none has been so universally adopted by the Profession, none has maintained its ground for so long a period. Baynton himself conceived that the efficacy of his strapping depended in a great degree on its drawing together the opposite edges of the ulcer; but to the support which it affords to the circulation in the veins, to the parts surrounding the ulcer, and to the ulcer itself, its beneficial action is mainly to be ascribed. In very many instances of indolent and varicose ulcer, the influence of

this principle is alone sufficient to originate granulation; while it sustains that process almost as effectually as rest in the horizontal position, and cicatrization accomplished by it is much more lasting, the newly organised structure having already become inured to exercise in the upright posture during its formation. As a general rule, indeed, it must be regarded as in all cases admirably adapted to complete and maintain the cure when reparative action has been set on foot by any means whatsoever.

The universal and indiscriminate application of Baynton's bandage to all varieties of ulcer on the leg has naturally led, as I have before remarked, to a depreciated estimate of its value; and, although its abuse by no means invalidates the evidence, in favour both of the practice and of the principle on which it ought to be conducted, afforded by the accumulated experience of half a century, its most steadfast adherents will scarcely deny that serious drawbacks from its utility exist. 1st. It is totally inadmissible in those extreme cases of irritable ulcer where the morbid sensibility is so acute that no degree of pressure can be borne, until by suitable measures it has been removed, or, at any rate, considerably mitigated. 2nd. There are other varieties of chronic ulcer, rare, certainly, and giving no indications of their refractory nature beforehand, in which, by no skill or care, can the sore be brought to heal under the operation of the strapping and bandage; and, 3rd, in ulcers furnishing a very copious discharge, and, *à fortiori*, when that discharge is of an acrid character, the plaster-strapping, whatever may be its composition, being impermeable, is productive of mischievous consequences, by diffusing it over the sound skin in the neighbourhood of the sore, and thus frequently giving rise to very troublesome erythematous inflammation and excoriation, retarding its cure if it does not actually increase the dimensions of the ulcer. Under similar circumstances, unctuous dressings are likewise very apt to produce the same troublesome consequences.

In addition to these objections, which, however well founded they may be, apply not so much to the treatment of chronic ulcers generally by Baynton's method, as to its employment in certain conditions of an ulcer, other disadvantages are alleged or felt. The material is expensive where economy is an object, particularly when the leg is strapped from the toes upward, according to the improvement of Baynton's plan introduced by Scott. As neither ointments nor lotions are compatible with the plaster-strapping, we are precluded from the use of many formulæ which are found effective against refractory ulcers of other parts. But perhaps no cause has more contributed to the present disuse of the strapping and bandage, as far as the labouring classes of London are concerned,—and that they are much less frequently resorted to than formerly I meet with almost daily proofs,—than the time and trouble they require, and the absolute necessity of renewing them at stated periods; twenty-four hours' neglect on the part of surgeon or patient, or a single unskilful application of the bandage, being often sufficient to undo all that has been gained by a month's care and attention.

Yet, unless more solid objections than these can be brought against the *principle* on which this treatment is based, I cannot admit that we have adequate grounds for rejecting the advantages it offers in favour of any proceeding demanding rest for its completion. And, with respect to the mode in which the principle is carried into effect, all these drawbacks and objections, with the exception of the last referred to, are met and obviated by the modifications of Baynton's method, described in my Essay on this subject; much subsequent experience of their operation having convinced me that I did not rate them too highly in stating my belief, that they would be found to possess "all the advantages without the disadvantages of Mr. Baynton's method." In corrobation of my own (perhaps partial) estimate, I might cite the testimony of several friends who have given the practice a fair trial; but the following extracts from the *Dublin Quarterly Journal of Medical Science* for August, 1849, will carry more weight than anything else I can advance in their behalf:—

"In a late number we recorded our experience as being in favour of Mr. Chapman's mode of cure. . . . We have since adopted this plan of treating chronic ulcers of the leg extensively, both in hospital and private practice, and have much satisfaction in stating, that, in the generality of cases, we succeeded in accomplishing with it a rapid and inexpensive cure. . . . In no case treated by us did the slightest cutaneous irritation or inflammation ensue; and of the method of treatment we entertain the highest opinion, on account of its cleanliness, facility of application, economy, and soothing support."(a)

I will not occupy your valuable space by reprinting details already before the public, but shall take this opportunity of repeating, that, strongly as I have expressed my persuasion, both here and elsewhere, of the superiority of those modes of cure founded upon the principle of support, I by no means advocate an exclusive reliance upon it, even in the treatment of indolent ulcers; having been long practically convinced that, in obstinate cases of this kind, we require all the artificial aid that can be brought to bear upon them. Careful bandaging, however, being undoubtedly the most effective means that we possess of counteracting that local congestion which is the chief source of indolence, it must ever be looked upon as primely instrumental in the cure of this class of sore, all other measures being but accessory thereto; whilst, in proportion as it controls over-distension, both of the veins and capillaries, it relieves the morbid sensibility thence arising; and, taking yet a wider range of utility, it excites, by its steady pressure, the absorption of that excessive deposit of coagulable lymph which is the great obstacle to granulation in callous ulcers. A ready explanation is thus afforded of the very large amount of success in the treatment of almost every variety of the complaint to which Whately and Baynton were enabled to appeal.

Nor must it be inferred that, because I ascribe the peculiar intractability of ulcers on the leg to causes of a local nature, and restrict myself to the details of their local management, I am inclined to underrate the importance of constitutional treatment. Where constitutional disorder exists, its prejudicial influence over the local affection must be combated before the local remedies can produce any permanent effect. As, however, the medical treatment of such impediments to healthy action should be conducted on the general principle, that, in all local maladies, we ought to endeavour to correct any evident derangement in the functions of the various organs of the body, and keep them in a state as nearly as possible approximating to that of health, I need not enlarge on this division of the subject. It may not, indeed, always be in our power to fix upon the seat of disorder; nevertheless, its existence may fairly be presumed from the refractory disposition manifested by the sore under local treatment which ordinarily proves successful; and, in these circumstances, there are certain remedies, which appear to act directly upon the nerves and capillaries through the constitution, to which we may have recourse with advantage. Mercurials have long and deservedly enjoyed a high reputation in the treatment of indolent and irritable sores; and opium has been brought under the notice of the Profession within the last few years by Mr. Skey, as a stimulant in chronic and callous ulcers capable of "rousing the dormant energies of local health through the means of the circulating system." In the *Lancet*, for May 10, is a paper by Mr. Tait, in which he advances a similar claim in favour of the Tinct. Cantharidis, in doses of twelve drops three times a day; and I have certainly witnessed an improvement in the aspect of what are termed weak ulcers, during the exhibition of Oxide of silver in 1-3rd gr. doses three or four times in the twenty-four hours, which I have been strongly inclined to ascribe to that medicine. Although not so sanguine with regard to the efficacy of these medicines as to rely upon them solely for the cure, I believe them to be serviceable adjuncts to the local treatment, and there can be no sufficient reason why it should not be carried on in conjunction with them.

But when these and all other constitutional measures have failed to work a change for the better, we have still a potent auxiliary in reserve in counter-irritation, effected by a small permanent blister on the upper part of the leg, which is almost always attended with marked benefit. The cuticle having been raised by the application of Acetum Cantharidis to some point below the knee, not lying over a vein, and as little exposed as possible to disturbance from muscular movements, the surface denuded must be dressed daily with a disc of Brown's or Albespeyre's cantharidine paper, about the size of a shilling. In some individuals whose skin is more than usually sensitive, the epispastic paper causes a good deal of pain for the first day or two, and cannot be borne for more

(a) I must express my thanks to the Reviewer, who is unknown to me, for the pains he has taken to test the practice before he pronounced an opinion upon it.

than twelve hours out of the twenty-four; and, when this is the case, it becomes necessary to dress with the paper in the morning only, and with any simple cerate at night. This very moderate degree of counter-irritation furnishes a considerable discharge from a small surface, and appears to act quite as beneficially upon a stubborn sore as an issue made with caustic potass, and maintained in the customary manner, by the introduction of peas or beads, which would be very likely to give rise, in the lower extremity, to an ulcer as intractable, perhaps, as the original disease. Among other cases, I succeeded last year in effecting, by this proceeding, the cure of a large superficial ulceration on the inside of the calf, which had resisted for nine months all other measures, constitutional and local. Nothing beyond a general delicacy of habit could be detected; but the persistence of the local affection led me to suspect that some latent disorder of the general health existed, which might render the healing of the sore unsafe, even could it be accomplished by the ordinary means. The readiness with which it yielded to counter-irritation strengthened this suspicion, and as soon as cicatrization was complete, I suffered the blister on the leg to heal, and formed a similar issue upon the arm, which I directed my patient to keep open as long as he could. This gentleman afterwards removed into the country by my advice, and has continued perfectly well ever since he left London.

Another case, attesting still more strongly the utility of counter-irritation in chronic ulcers of the leg, which some surgeons are disposed to question, will be found in the section relating to the management of irritable sores.

When speaking of the various means resorted to for the purpose of exciting granulation in atonic ulcers, (at p. 91 of my Essay,) I transcribed from one of Mr. Bransby Cooper's Lectures, published in the *Medical Gazette* for Oct. 1, 1847, his description of the electric moxa, suggested some years since by Dr. Golding Bird. I did not venture to give an opinion as to the mode of action of this ingenious process, or its value as a remedial agent in the treatment of ulcers, until I had become more familiar with its results. Having now tried it in a number of cases, I am inclined to believe, that whatever improvement takes place in an ulcer to which the apparatus is applied, is due rather to the counter-irritation of which it is the medium, than to any direct influence it is capable of exercising upon the sore. The eschar produced under the zinc plate is formed, I think, too rapidly to allow time for the ulcer to be materially affected by the stream of negative electricity generated beneath the silver plate, a slough of some depth commonly resulting from its application for twelve or fourteen hours; and, although granulations do occasionally sprout up within a few days after it has been employed, this has seldom occurred until some discharge from the issue had begun.

In order to test its agency on the sore itself, I have removed the zinc plate to a spot at some distance from it, above the knee, and have endeavoured to prolong the period of its action by applying the plates, for two or three hours only, on several successive nights. The formation of the slough has thus taken place more slowly, and the surface of the ulcer has been subjected to the current of electricity for a longer period; but greater pain and inflammation have accompanied it, and no more positive evidence has been obtained. In fact, I very much doubt whether the effect of the moxa is in any one respect superior to that of the small blister above described; while it is unquestionably more painful, and quite as likely to end in a refractory sore as a common issue. I observe that, in recording the last case thus treated by Mr. Bransby Cooper, (See the *Lancet* for January 25, 1851,) the reporter leans to the same conclusion, which I have been led to form, as to the manner in which the electric moxa acts upon this complaint; remarking that, taking into consideration the amount of inflammation stirred up by it, "at first sight its influence seems more likely to have been exerted indirectly than directly."

The exclusion of *inflammatory* ulcers from consideration as a separate class, on the ground that inflammation is an accidental complication to which all kinds of ulcers are exposed, and is not a characteristic of any one species, might almost justify my passing them by altogether, since their treatment falls quite as much under the operation of general principles as that of constitutional impediments to healthy action; but there is one very serviceable antiphlogistic remedy on which I wish to say a few words. A well-founded objection to the employment of leeches in such cases is commonly entertained, namely, that the leech-bites themselves are very apt to become troublesome ulcers; and thus much more harm than good is to be apprehended from their use. This is undoubtedly true, when they are applied upon the inflamed skin of the leg, or over an inflamed vein;(a) but the difficulty is entirely obviated by applying them, not to the skin, but to the actual surface of the ulcer, — a practice attended with very little pain, and from which I constantly derive the greatest advantage. Two or three leeches will generally be sufficient for this purpose, as the blood flows rather freely from an ulcer; but if, after a couple of days, there is still some remnant of inflammatory action, it is easy to repeat them.

There is yet another salutary measure, which, in my judgment, is of scarcely less practical utility. As a preparation for all other local treatment, the skin for some distance round the sore should always be carefully cleansed with mild soap and warm water,—a matter so seldom properly attended to, that a first inspection of old cases of "bad leg," especially when unctuous dressings have been long used, would almost tempt one to imagine that the preservation of the crusts, scales, and sordes, with which the surrounding skin is too often allowed to become thickly coated, (even in patients of the better classes of society,) was really regarded as essentially conducive to the cure of the ulcer.

I have included the treatment of indolent ulcers and of *those complicated by varicose enlargement of the veins* under one head, as the intractability of both springs from the same source; and because the same modification of Baynton's bandage which succeeds with the former answers equally well in the majority of cases of the latter. But when the Varix is of long standing, and the veins lie entrenched in a deposition of coagulable lymph, the straps and bandage are lifted over them; insomuch that, eluding the compression which is equably distributed over the entire surface of the limb, they are very imperfectly closed, and a considerable column of blood still weighs upon the capillaries of the ulcer. To remedy this defect in the action of the bandage,—before I became acquainted with Mr. Startin's ingenious method of artificially compensating for the lost function of their valves, (described in the *Medical Times* for March 15,)—I adopted the following expedient:—Along the track of the largest vein above the ulcer, a short length of vulcanised India-rubber tubing was adjusted, and retained *in situ* by one or two straps carried upwards from the sore. Its elastic expansion beneath the bandage fills up the channel in which the vein lies, and keeps the vein so nearly closed that its diseased condition is not allowed to affect the sore injuriously. Several portions may be employed where more than one vein require closing. But since I witnessed the application of Mr. Startin's spiral riband, at the Hospital for Diseases of the Skin, and found that it accomplished the object desired so satisfactorily and commodiously, I have generally had recourse to it, to ward off the mischief occasioned by this complication, in preference to my own device. In my hands it has succeeded far better in small than in large sores; and in no variety of the disease have I seen it produce more rapid improvement than in the peculiar form of ulcer directly caused by Varix. Its beneficial operation becomes immediately apparent in the diminished tension observable in the whole course of the enlarged vein, and in the improved aspect of the sore even when the patient stands. It is worth noting, too, in illustration of its principle of action, that when the sore is elongated in the track of a varicose vein, cicatrization usually commences at the upper end, speedily altering its shape from oval to circular. In short, I consider that the Profession is much indebted to Mr. Startin for the suggestion of these supplemental valves, and that the contrivance furnishes us with a powerful adjuvant to the bandage in the management of such cases.

The elastic riband is not applicable next the skin where Erythema or any other cutaneous affection of the leg is

(a) "The bite of a leech over an inflamed vein," says Sir B. Brodie, "will give the patient a good deal of pain, and the little wound will be difficult to heal." "Never apply them over the inflamed part, but always at some distance above it."—Lectures, pp. 173, 177.

A middle-aged woman consulted me for an inflamed ulcer on the leg, in January last (1851). A couple of leeches to the surface of the sore removed all pain and inflammation, after which I saw no more of her until June, when she came to me in great alarm, with the leg highly inflamed, and six more deep ulcers, in addition to the old sore, all produced by the bites of leeches applied to the *skin*.

present; and I have more than once, especially in warm weather, seen it produce annoying excoriation when the skin was perfectly sound. Under these circumstances I have found it answer extremely well put on over the bandage; but great care must then be taken that it does not cross the sore, which would be seriously galled by its pressure. Worn thus, it proves a certain and convenient method of securing the turns of the bandage from displacement, when the leg is unusually bulky, or where, from any other cause, they are liable to slip.

16, Lower Seymour-street, Portman-square.

[To be continued.]

COMPOUND FRACTURE OF THE CRANIUM IN A BOY,

WITH LOSS OF A PORTION OF BRAIN; THE HEAD HAVING BEEN COMPRESSED WITHIN A SPACE ASCERTAINED NOT TO EXCEED 3¾ INCHES.

By ROBERT ANNAN, Esq., L.R.C.S.E.

John Elder, Milnathort, Kinross-shire, a robust boy, aged 8, while amusing himself by "taking a ride" on the crossbeam of a malt-mill, impelled by one horse, inconsiderately laid his head along the beam, and was thus caught by the spur-wheel, (formed of cast-iron, and measuring about two feet in diameter,) which passed over his head,—the distance from the edges of the teeth of the wheel being afterwards found not to exceed 3¾ inches from the wooden beam.

By account, he screamed out, fell to the ground, and almost immediately leaped up, which led a bystander at first to imagine the boy did so in play. He was immediately removed, in a state of insensibility, to his father's house, less than 100 yards distant, when Mr. Birrell, surgeon, (now retired, and residing at Grove-terrace, Peckham,) being called, found him totally insensible, the head much swollen and puffed, and presenting the appearance of one very large bruise, with a slight abrasion of the scalp over the anterior part of the left parietal bone. With a common lancet, Mr. Birrell punctured the swollen and distended scalp, when a quantity of fluid blood, mixed with brain, was discharged, and preserved in a saucer, which, on my arrival, in about half an hour, was shown to me,—the quantity of brain being estimated at about half an ounce.

The nature of the injury leaving no doubt as to extensive fracture and depression of the skull, with laceration of the membranes, and deep and extensive injury of the brain itself, we availed ourselves of the advice of Mr. William Porteous, surgeon, R.N., (since deceased,) when I laid bare, by incision, the whole extent of the injury, which disclosed a quantity of brain exterior to the bone, it being evident that a large portion of bone had been thus depressed by the teeth of the wheel passing over the head. The trephine was applied over the superior and undepressed portion, when about two square inches of bone were removed by the forceps and elevator, having been embedded a considerable depth in the substance of the brain. The wound was dressed with adhesive plaster, and a compress and bandage applied, and in less than an hour the boy showed distinct signs of returning consciousness. The ordinary antiphlogistic means were employed, and his recovery proceeded without a bad symptom. On the 21st day from the accident, being without doors, and having quarrelled with a playfellow, he was struck by a stone, which, cutting through a leather cap and bandage, divided the scalp deeply within an inch from the vacant space in the bone. No harm resulted, and another week found him again at play on the public streets, with the precaution of a thin plate of iron, half-helmet fashion, fitted to the left side of the cap. Ten years afterwards, being about to emigrate to the United States of America, he applied to me for a certificate to exempt him from serving in the militia. A tough membranous substance had supplied the place of the bone, and the intellect was unaffected.

In this case, the one thing remarkable was the *very small space* through which the head had passed, showing the amount of injury to the skull and brain that may be sustained in young subjects. I regret that it did not occur to my mind to take a measurement of the boy's head; but the fact that he was a full-sized robust boy, may supply so far what is here wanting. In a letter recently received from Mr. Birrell, he says, that "he well recollects, (having made a neat sketch of the injury and vacant part, with an exact measurement of the portion of bone removed,) that the space through which the boy's head had passed, save for the measurement at the time, would have been deemed incredible."

Had my avocations permitted, it was my intention to have added a few more cases of injury of the head; but this I must defer tu a future, and perhaps not distant, period.

Kinross.

CASE OF NÆVUS OF THE EYELID,

CURED BY PLATINUM WIRE HEATED RED HOT BY GALVANISM.

By RALPH M. BERNARD, Esq.

Surgeon to the Bristol Eye Hospital, Police Force, Bridewell, etc.

Frederick Miles, aged 5½ months, was admitted an inpatient at the Bristol Eye Hospital, Oct. 25, 1849, with nævus of the upper eyelid on the right side; he had been previously treated, as an out-patient, with croton oil, punctures, and saturated solution of alum, but with no good effect, the tumour continuing to increase.

On admission, the tumour, when the child cried, swelled to the size of half a marble, and, when quiet, involved two-thirds of the upper eyelid.

Two pieces of thin platinum wire were passed, at right angles to one another, through the base of the nævus, and heated red hot for the space of rather more than half a minute, by connecting them with a galvanic battery; the wire was then withdrawn, and cold-water dressing applied. Small superficial sloughs formed at the points where the wire penetrated the skin, but healed in about three weeks.

The tumour was much diminished in size, and I considered that, after a little time, the remains would have been obliterated; however, on April 17th, 1850, as the swelling had increased on each side of the part of the lid which had been treated with the red-hot wire, I proceeded to introduce four platinum wires at right angles, heated as before, with results perfectly satisfactory, as the present appearance of the child is as follows:—Tumour quite obliterated; skin of eyelid rather less moveable than the other side, and showing six small cicatrices, which, however, are not visible at the distance of two yards.

Clifton.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

THE LATE DEATH FROM CHLOROFORM.

We have received from Mr. Lloyd the following account of the *post-mortem* of the man reported in our last Number as having died from chloroform:—The body was well formed and muscular. The rigor mortis was complete in the trunk and limbs. The thymus gland was as large as it usually is in its fullest development. The venæ innominatæ and vena cava superior were full of blood, and probably would have been distended, but that two or three ounces of blood had flowed into the coffin, from the opening made into the external jugular vein. The right auricle and ventricle were distended with blood, and would probably have been more so but for the escape of blood mentioned above. The left auricle and ventricle contained very little blood; the left ventricle was perfectly contracted in the rigor mortis. The heart was of full size. It appeared in every part natural in its texture, and as if it had possessed full power. Its valves, also, were all healthy; neither could any disease be found in any of the chief blood-vessels within the chest. All the blood, however, was fluid, and it remained without coagulation after its escape from the heart and vessels. It had also a brownish purple hue, much like that which is commonly observed in the spleen: none of it, when thinly spread out, presented the ordinary dark, black, or crimson hue of venous blood. Both lungs were attached by old adhesions about their apices and posterior surfaces, but these were of small extent. Their texture was healthy, but they appeared more than usually collapsed and dry. Their blood-vessels were not over filled. The mucous membrane of the large bronchi and trachea was turgid, and apparently swollen with congestion of its smaller blood-vessels, and a similar condition existed in the larynx above the vocal chords, but not to such an extent as in any appreciable degree to narrow the glottis. The mucous membrane of the stomach was, over a great extent,

especially at the fundus, blotched and suffused with dark crimson, through exceeding fulness of its veins and small blood-vessels; but its textures appeared healthy. It contained a small quantity of thin brownish fluid, the remains apparently of the last meal. The whole intestinal canal, to external examination, appeared healthy. The liver, pancreas, and spleen were natural. The hepatic venous plexuses and intra-lobular veins appeared over filled. In the kidneys, which were of natural size and texture, the tubular portions were very dark, apparently with intense venous congestion. The cortical part was comparatively pale. The vena cava inferior and its chief branches were more than usually filled with blood. The skull was natural, except in small portions of the diploe, in which a nævous condition of the blood vessels, corresponding with the disease by the ear was seen. The dura mater and longitudinal sinus were natural. The cerebral arachnoid membrane was in many parts, and over a wide extent, opaque and somewhat thickened. A few ochre-yellow small spots also appeared in it. The tissue of the pia mater was infiltrated with a more than ordinary quantity of pellucid fluid. Between the anterior lobes of the cerebral hemispheres, small portions of the opposed surfaces of the arachnoid membrane were adherent; but both this and the other morbid conditions of the membranes of the brain appeared to be the results of disease long previous to death. The convolutions of the cerebrum were small, and the furrows between them wide. The surfaces of the optic thalami were uneven and wrinkled, as if those bodies were somewhat shrunken. But no unnatural appearance presented itself in any other part of the brain, or medulla oblongata.

LONDON HOSPITAL.

By NATHANIEL WARD, Esq., F.R.C.S.

ENLARGED BURSA OVER THE RIGHT AND LEFT PATELLA REMOVED BY EXCISION.

A baker's wife, stout and fat, about 40 years old, came under my care, suffering considerable inconvenience from enlargement of the bursa over the right and left patella. The left bursa was larger than any I have had an opportunity of seeing. It measured round the base 12 inches; was prominent from the surface of the limb about 4 inches; contained a large quantity of fluid; was unadherent to the skin, the surface of which was red and inflamed, and very thin over the centre of the cyst. The patella could not be isolated from the bursa, but was overlapped by it, and apparently imbedded in its substance at the back part. There were considerable pain and tenderness on pressure; in fact, about three or four weeks before her admission, a severe attack of inflammation had come on in the bursa without any perceptible cause, leading to an increase in its volume. Prior to this attack she had never had any pain in it, and it had been gradually increasing for four or five years, the time that she first directed her attention to it.

The bursa over the right patella measured round its base seven inches, was prominent from the surface to the extent of three inches, felt more dense than the left, but was adherent in a similar manner to the patella behind, overlapping its circumference. No symptoms of acute inflammation had at any time supervened in it. The walls felt very dense and no fluctuation was sensible to the touch. It had been observed growing about the same time as the left; and the woman before her marriage, about a year prior to admission into the hospital, had been a housemaid, and had had a great deal of kneeling.

The patient was put on the middle diet of the hospital, and the left limb was placed on an inclined plane, and cold lotions kept constantly applied. A purgative was occasionally administered. This treatment was continued for nine days, at the end of which time the acute inflammation had subsided, accompanied with a slight diminution in the volume of the tumour, and a cessation of pain and tenderness on pressure. An incision of an elliptical form was then made over the centre of the tumour, about 1½ inches long, and the bursa carefully dissected away from the structures with which it was in connexion. It was found, as had been anticipated, firmly adherent to the capsular ligament and the patella, but by keeping the edge of the knife turned towards the cyst, no difficulty was experienced in removing the bursa entire; no vessel required a ligature. The wound was brought together by sutures, and the knee-joint covered over with strips of wet linen and oiled-silk over them, and a straight splint was applied at the back of the knee-joint, and kept in place by a turn or two of a wet roller. A full opiate was given after the operation, and the limb was placed on the inclined plane. The patient passed a restless night. The knee-joint was dressed on the following day with strips of linen and oiled-silk, and covered over with a many-tailed bandage, which was more easy of application than the roller, as it could be put on without any disturbance to the limb. The patient went on very well for a day or two, when she had a severe bilious attack, which subsided under treatment in a few days. On the fourteenth day she complained of tenderness at the inner part of the knee. In this situation the integument looked puffy and red, and, on making gentle pressure on it, pus oozed out from the middle of the wound. From this time to the twentieth day, gentle pressure by a dossil of lint under the wet strips of linen was made, with much relief to the pain originally complained of, and, on the twenty-fifth day after the removal of the bursa, the cicatrix was complete, and the parts surrounding it involved in the operation were sound. Three days after this, the right knee was operated on; the patient, before being removed to the theatre, having had the left knee kept straight by a splint bound on behind, in order to prevent any straining of the cicatrix, which could not at present be considered very firm. The bursa was removed in a similar manner as the left, and the same precautions were had recourse to, inasmuch as it was found similarly adherent to the patella. The cicatrix was complete in one month, the same local applications having been had recourse to.

On examining the cysts after removal, the left had the appearance of a small orange; it was of a dense fibrous structure, ranging in thickness from three-eighths to a quarter of an inch, the thickest part being behind and laterally. It was filled by a yellowish sero-purulent fluid, and its interior was lined by an irregular deposit of soft fibrin—the result of the inflammatory action which had been induced prior to admission. The right cyst was of a similar dense fibrous character, and varied in thickness from one-eighth to a quarter inch, the thickest part being in front, the thinnest behind in relation with the patella. Its cavity was filled with yellowish half-organized fibrin, having a concentric and areolar arrangement, softer in the middle than at the circumference, in which situation the most superficial layers adhered more or less intimately to the sac, the structure of the one passing here and there insensibly into the structure of the other.

ENLARGED BURSA CONNECTED WITH THE TENDON OF THE SEMITENDINOSUS.—PUNCTURE.—SUPPURATION OF THE SAC.—CURE.

Case 2.—A boy, aged 8 years, came under my care on account of a tumour in the popliteal region. It was convex on the surface, and pushed backward the skin to the extent of three-quarters of an inch; it measured two inches from above downwards, and about an inch transversely. There was a slight horizontal constriction in the centre. It was firm, elastic, and yielding on pressure, and was somewhat oval in outline. When the thigh was flexed, the tendon of the semitendinosus could be felt gliding obliquely over it, along its inner and lower part. The development of the tumour could not be traced to a blow, or any unusual strain; and his mother had only accidentally noticed it three months before his coming to the hospital. It had gradually increased since that time, but its growth was unattended with pain. As the boy was attending as an out-patient, it was not deemed prudent to puncture it, but powerful counter-irritants were applied at intervals during a fortnight, without any benefit. He was admitted into the hospital. A grooved needle was passed into the tumour, and the contents of the cyst emptied by firm pressure. The contained fluid resembled that usually met with in the bursæ about the wrist, but was somewhat more dense, and of a yellowish tinge. Firm pressure was immediately made by a large dossil of lint and a bandage, and the limb was confined in a straight thigh-splint. On the second day, a good deal of fever had come on, and the boy was sick, and complained of headache and thirst. The back part of the leg was hot and tender to the touch. He was ordered saline medicine, and an occasional purgative; the bandage was taken off the limb, and the leg was dressed with wet rags and oiled silk. On the ninth day, there was considerable swelling in the popliteal space, and the surface of the skin was hot, red, and tender. Fluctuation was distinct. A free opening was made, and gave vent to three ounces of pus, mixed with a little venous-looking blood. The abscess kept on discharging for thirteen days, when a piece of lint which had been kept in the opening could no longer be introduced. The patient shortly after left the hospital, the back of the leg and thigh being protected with soap plaster and a bandage.

BURSA OVER THE INTERNAL MALLEOLUS OF THE RIGHT FOOT.—FAILURE OF PUNCTURE.—EXCISION.

Case 3.—A boy, aged 11, came under my care with a bursal tumour as large as half a walnut, situated over the internal malleolus. He perceived, about four months ago, a small painless swelling, which he could not refer to any injury; it had gradually increased in size. It appeared to have no connexion with the tibialis anticus.

It was punctured with an exploring needle. The cyst

was found extremely dense; and about a drachm of clear limpid fluid escaped, which was much thinner than that usually contained in similar cysts. The escape of the fluid diminished the volume of tumour but little. A compress, secured by a bandage tightly applied round a leg splint, was placed over the ankle. Four days after the puncture, the bursa was quite as large as it was originally, was very movable, and gave the idea of being but loosely connected with the surrounding parts. An incision was made over it, and the bursa fully exposed to view. It was found very firmly adherent to the internal malleolus; the anterior three-fourths were consequently only removed, and the remainder left in contact with the bone. The wound was brought together with sutures and strapping, and over this warm-water dressing, and a splint and bandage were applied. For two days succeeding the removal of the bursa great pain continued. The wound had cicatrized on the twentieth day by the granulation process.

Remarks.—The above cases partly illustrate the methods that have been found most effectual in the treatment of diseased subcutaneous and deep bursæ. The excision of the former, when large and with thickened walls, can be safely employed when puncture and subsequent pressure have failed to effect a cure, or when the size of the bursa is so great as to give no hope of that treatment being followed by success. I have seen several cases of large patellar bursæ removed by the knife without the slightest injurious effect, due regard (as in all other operations) having been previously paid to the constitutional condition of the patient; the subsidence of inflammatory action in, and the parts surrounding, the bursa; and the form of dressing applied to the wound after excision. In instances in which the bursa has been very firmly adherent to the patella and capsular ligament, it has been found sufficient merely to remove the unadherent anterior portion, leaving the posterior *in situ* to become obliterated by the granulation process, —a plan adopted in the third case.

Within the last few months Mr. Curling has had three or four cases in which he has adopted this line of practice, and with uniform success. I should have followed it in the first case related; but from the great size of the cysts, the cure would, I have no doubt, have been materially retarded. The dissection can, I imagine, always be accomplished without endangering the capsular ligament, by keeping the edge of the knife carefully turned towards the bursa, and proceeding slowly and cautiously.

The bursæ that usually come under notice in the out-door practice of the hospital are those over the patella and those about the carpus. For the treatment of these, my colleague, Mr. Critchett, invariably punctures them at the side with an exploratory needle, squeezes out the contents through the groove in the needle, and applies firm pressure on their anterior aspect, through the medium of a pad, strapping, and a bandage. He has never seen any ill consequences. I have occasionally adopted this practice with success, but have been usually in the habit of treating them by powerful counter-irritation, which, in order to be of any benefit, must be effectually applied. The plan I adopt is to have the bursa, with the skin surrounding it, painted over with a saturated alcoholic solution of iodine, and over that to place some lint, covered over with camphorated mercurial ointment, and kept in place by a bandage. The applications blister the surface very freely. On the third day the bandage is taken off, and a poultice applied for a day or two. One application is occasionally sufficient for a cure; at other times it must be repeated. I cannot call to mind any case of moderate-sized patellar bursa in which this treatment has failed. I allow it is rather severe in its character, but I have found that many patients will rather submit to severe blistering than to the use of any surgical instrument, however simple.

In the treatment of the bursæ about the carpus, puncture, with evacuation of the contents of the cyst, and subsequent pressure, is by far the most effectual method of treatment. In the majority of cases, the puncture does not require to be repeated, and as a precautionary measure I am in the habit of placing the hand and forearm on a splint for the first three or four days, as otherwise inflammation might probably supervene, and be attended with serious consequences.

Dr. Ramsbotham.—For the last half century *a* Dr. Ramsbotham has been *the* City accoucheur. When Dr. Ramsbotham *primus* died, he was succeeded by Dr. Ramsbotham *secundus*,—a worthy son of a worthy father. But it seems the City is no longer to rejoice in this honoured name. Dr. Ramsbotham has forsaken the halls of his father, and migrated to the West-end. He has removed to Portman-square, and carries with him the good wishes of all who know him, either professionally or privately.

THE PARISIAN PRACTICE OF MEDICINE AND SURGERY.

HOTEL-DIEU.

By F. W. PAVY, Esq.

SUCCESSFUL TREATMENT OF CHRONIC ABSCESS WITH IODINE INJECTIONS.

One of the most striking contrasts between the London and Parisian practice of the present day is presented in the treatment of abscesses of a chronic nature, as they are observed to occur in persons of a strumous disposition. While English surgeons, for the most part, place their chief reliance in constitutional measures, and adopt but little active local treatment, Paris surgeons, on the contrary, depend almost exclusively on the employment of a local remedy, possessing such active and energetic properties as to create not only astonishment, but alarm, for the safety of the patient in the minds of those who for the first time witness its use. The injection of iodine into the cavity of synovial membranes was some years ago suggested and adopted by M. Bonnet in serous and purulent effusions of the joints. The same remedy was afterwards recommended as a treatment of chronic abscesses, especially those connected with a strumous taint, and depending on diseased bone, and is now almost universally relied on at the different hospitals of Paris as a safe and effectual mode of producing the obliteration of these chronic suppurating cavities, which frequently prove so obstinate under the influence of other measures. Cases have even been recently recorded in which a solution, consisting of 20 parts of tincture of iodine, 4 parts of iodide of potassium, and 100 parts of water, was injected into the peritoneal cavity in ascitic dropsy that had resisted other treatment, and was followed by the most successful and encouraging results. Notwithstanding such success, however, he must be a bold practitioner who would venture to tap, and afterwards inject a fluid of such a nature, into so vitally important a serous cavity as that of the peritonæum. With chronic abscesses the case is different, and seldom are any constitutional disturbances observed to arise from their injection, although such practice is now of almost every-day occurrence here. The method of proceeding is precisely the same as that adopted for the radical cure of hydrocele; and, in fact, Paris surgeons think no more of injecting the suppurating cavity of a large lumbar abscess with a solution of iodine, than London surgeons do of injecting the same solution into the tunica vaginalis in cases of serous effusion into this cavity, or hydrocele.

The following report, as illustrative of this subject, we have taken from a patient in the Hôtel-Dieu, under the care of M. Roux, a sound and cautious practitioner; but it is not difficult to meet with many such cases at the other hospitals of Paris; indeed, in the clinique of M. Velpeau, at la Charité, there are at the present moment two patients, one affected with a lumbar, and the other a gluteal abscess, which are being treated with iodine injections; and, a short time since, we observed a case, in the service of M. Nelaton, at the Hôpital Clinique de la Faculté, of a strumous glandular abscess of the neck, treated with an injection of a small quantity of tincture of iodine every day; it created a little momentary smarting pain, but no constitutional disturbance, and the patient has since left the hospital cured.

Emile Marliane, aged 31, admitted into the Hôtel-Dieu, under the care of M. Roux, January 26th, 1852. Is by profession a hair-dresser, and presents a spare and decidedly strumous appearance. About four months previous to his admission, he was affected with pain and weakness in the loins, and pains shooting down the legs, accompanied with shiverings, and much febrile disturbance, all of which he attributed to a cold, from working in a damp room. A swelling soon afterwards appeared in the lumbar region, on the right side, and gradually increased in dimensions until his entrance into the hospital, when he presented a large fluctuating swelling, occupying the whole right side of the lumbar region, and extending into the gluteal region nearly as low as the trochanter major of the os femoris. This swelling was tapped with a trocar and canula, and about thirty ounces of a strawberry-coloured, flaky, purulent fluid withdrawn. Several ounces of a solution, consisting of the compound tincture of iodine and water, in the proportions ordinarily used for the injection of hydrocele, were injected through the canula into the cavity of the abscess. It immediately occasioned a considerable burning, smarting pain, and, after being allowed to remain for five minutes, it was again withdrawn through the canula, and the patient was soon almost free from pain. No constitutional disturbance followed the employment of this measure, but fluid began gradually to re-appear in the abscess, the boundary of which, however, was much diminished in extent. About ten days after-

wards it was again tapped, and re-injected with the iodine solution, and the same process has been repeated twice since, with the effect of each time considerably diminishing the extent of the abscess. The last injection was employed on the 1st of March, and on the 12th of March about an ounce of fluid only having collected, and being situated quite superficially, the abscess was laid open by means of caustic potash, and thus converted into an open sore, which is now (March 17th) about the size of a half-crown piece, presenting a perfectly healthy appearance, and in progress of healing rapidly. The patient indeed may be looked upon as quite convalescent.

The above case has been unquestionably of a somewhat tedious nature, and more so than the generality that are submitted to the same treatment; but it was also a case of a very severe and extensive nature. Since our attention was attracted to it, another patient was admitted into the same ward (March 2nd, 1852), similarly affected with an abscess in the right lumbar region. It had been forming about two months, and did not extend beyond the loins. The day after his admission he was submitted to precisely the same treatment as the former patient. A small quantity of fluid collected after the injection, but this has since been almost completely re-absorbed, and the patient will in all probability leave the hospital in the course of a few days, perfectly and rapidly cured after one single injection.

According to some observations recently published of M. Bonnet, iodine is very freely absorbed into the system from suppurating cavities, and also when used as an external application to suppurating wounds. It may afterwards be readily detected in the urine by the ordinary tests, starch and chlorine, or nitric acid, and it thus is not only to be considered as a local agent in these applications, but also as a constitutional remedy of considerable importance in meliorating the strumous disposition so frequently encountered in association with these cases.

SCIENTIFIC LECTURES.

HUNTERIAN LECTURES ON THE ANATOMY OF INVERTEBRATE ANIMALS.

BY RICHARD OWEN, F.R.S.,
Hunterian Professor to the College.

THIS DAY, MARCH 27, and TUESDAY, MARCH 30.—Lectures VI. and VII. —*Entozoa.* No representatives of the order Acanthocephala have been found in the human subject. Armature of the proboscis in the genus Echinorhynchus; Hunter's illustrations of the effects of that organ in the intestines of the Whale. Ramified form of the nutritive system. Dioecious generation of Acanthocephala. Testes and their axial mesorchium: varicose sperm-ducts, sperm-vesicle, prostates, and penis. Numerous free ovaria: oviducts and uterus suspended from a mesometrium: their active movements. Development of the uncinated embryos of the Echinorhynchus. Species of the Nematoidea which infest the human body. Trichina spiralis, Filaria medinensis, Filaria oculi, Filaria bronchialis, Trichocephalus dispar, Spiroptera hominis, Strongylus gigas, Ascaris lumbricoidas, and Ascaris or Oxyurus vermicularis. Their integument, muscles, nerves, alimentary canal and appendages, and nutritious canals. All the Cœlelmintha dioecious. Generative organs of the fluke-like Linguatula. Capillary type of the testes and ovaria in the Nematoidea. Testes and sperm-duct a single continuous tube in all: penis double in some species. Ovaria and oviducts continuous; usually double. Rachidian arrangement of ova, and their enormous number in the Ascaris lumbricoides. Various situations of the vagina in different species. Act of impregnation and primary changes of the ovum. Development of Ascaris and Strongylus. Viviparity and metamorphosis of the Guinea-worm. Probable larval nature of Trichina spiralis. Bearing of the known generative phenomena of Entozoa on the hypothesis of spontaneous generation.

THURSDAY, APRIL 1, and SATURDAY, APRIL 3.—Lectures VIII. and IX. *Polypi.*—The chief modifications of their anatomy indicate the three classes Hydrozoa, Anthozoa, and Bryozoa: their characters derived from the structure and relations of the digestive organs. Modifications of the radiating arms or tentacles: their thread-cells, dart-cells, and vibratile cylia. Chylaqueous cavities and canals. Modifications of the organs of support. Modes of propagation. Spontaneous fission rare; gemmation the rule. Process of gemmation: buds detached in Hydra, retained and developed in Sertularia. Male and female organs in Hydra. Various conditions of the male in dioecious polypes. Various positions of the ovaria. Individuals from buds develope ovaries or sperm-sacs, and propagate males or oviparous females. Alternate generation of Campanularia and Coryne. Ova and embryos of Bryozoa Antiquity of the class, and importance of Lithophytous polypes in modifying the crust of the earth.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, March 27.—MEDICAL SOCIETY OF LONDON. *Subject:*—Mr. LEONARD, "On Perforating Ulcers of the Stomach." Eight o'Clock.

——— ——— ROYAL INSTITUTION. *Subject:* — Professor BRANDE, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Monday, March 29.—ROYAL INSTITUTION. *Subject:*—C. B. MANSFIELD, Esq., "On the Chemistry of the Metals." Four o'Clock

Tuesday, March 30.—CHEMICAL SOCIETY. *Annual General Meeting* for Election of Officers Eight o'Clock.

——— ——— ROYAL INSTITUTION. *Subject:* — Professor T. WHARTON JONES, "On Animal Physiology." Three o'Clock.

Wednesday, March 31.—ROYAL INSTITUTION. *Subject:*—C. B. MANSFIELD, Esq., "On the Chemistry of the Metals." Four o'Clock.

Thursday, April 1.—HARVEIAN SOCIETY. Eight o'Clock.

——— ——— ROYAL INSTITUTION. *Subject:*—Rev. J. BARLOW, M.A., Sec. R.I., "On the Physical Principles of the Steam Engine." Three o'Clock.

Friday, April 2.—ROYAL INSTITUTION. *Subject:* Sir C. LYELL, "On the Blackheath Pebble-Bed, and on Certain Phenomena in the Geology of the Neighbourhood of London." Half-past Eight o'Clock.

——— ——— WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON. *Annual Meeting.* Eight o'Clock.

Saturday, April 3.—MEDICAL SOCIETY OF LONDON. *Subject:*—Dr. BAUER, "On Spinal Curvature, with Especial Regard to the Treatment now Pursued in Germany." Eight o'Clock.

——— ——— ROYAL INSTITUTION. *Subject:* — Professor BRANDE, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.

Medical Times & Gazette.

SATURDAY, MARCH 27.

THE GRANT TESTIMONIAL.

MANY of our readers will have observed on the cover of a late Number of our Journal, the advertisement of a Committee and subscription list for the purpose of presenting to Professor Grant, the Cuvier of England, a substantial testimonial of the veneration in which his great talents, his unwearied industry and zeal for the progress of anatomical and zoological science, and his numerous and valuable contributions to comparative anatomy, zoology, and palæontology are held by the scientific world. We are gratified to observe, that the lists of the Committee and subscribers already include a large proportion of the most eminent votaries of science of this age; and we cannot doubt but that when due publicity shall have been given to the proceedings of the Committee, the lists will fully represent the science of England in all departments connected with medicine, surgery, and natural history. Already, we are authorized to state, the private exertions of the members of the Committee and their friends have raised three hundred pounds.

It may be pertinently asked why, and for what reasons, do the Committee call upon the scientific public for contributions to the Grant Testimonial Fund? We will proceed at once to answer this inquiry. In no other country in Europe save England, could a man, having attained the high scientific position occupied by Professor Grant, stand in absolute need of a testimonial such as that intended for him. Had he had the good fortune to have been born in any of the petty States of Germany,—the land of rags and bones, as it has been contemptuously called,—professorships, with an ample income for his maintenance, would have awaited him, and the Universities of Germany would have vied with each other to possess him as their professor; but in England, the richest country of the whole world, he has been and is permitted to vegetate on a ridiculously inadequate income, and he has been tacitly refused a share of the small pittance annually doled out by the Government as a reward to literary and scientific merit, although repeated and urgent appeals have been made to that Government by men whose testimony might have been respected, and whose

judgment in such matters was evidently equal, if not far superior, to that of the advisers of the Premier.

That the Committee have ample justification for their appeal to the lovers of science will be evident when we state, that his sole source of income, after the expenditure of the whole of his private resources in the prosecution of his studies, has been for the last twenty-five years the Professorship he holds in University College, the annual returns of which have fluctuated from 100*l.* to 150*l.*, and that, previous to November, 1849, when the College was enabled to guarantee him 100*l.* per annum, he was unable to calculate on more than 50*l.* for the ensuing year. His circumstances becoming publicly known about that time, it was determined by some of his friends and admirers to endeavour, if possible, to raise such a sum of money by subscription as would enable them to purchase an annuity, to add at least to the comforts of his declining years, or to suffice for his sustenance, should he become, from any cause, incapable of performing the duties of his Professorship. The Committee first met in June, 1851, but it was soon after suggested that it would be impolitic to make the intention public until after the Government pensions for that year had been announced; the Committee thereupon determined that the publication of their proceedings should be deferred, but that in the meantime every exertion should be made by the members of the Committee privately to augment the subscription list. The result of these private exertions has been, as we have already said, the collection of 300*l.* The pensions for the past year having been announced, and all hope of an early award of a pension having been abandoned, the Committee have now determined on making a public appeal to all scientific men and patrons of science. They have good reason to expect, judging from the results of their own private exertions, that this appeal will be liberally responded to, and that a sufficient sum will tbe raised to present to Professor Grant a life annuity of 100*l.* per annum.

It is an established and incontrovertible fact, that our immense wealth as a manufacturing and commercial nation is the result of the practical application of scientific principles, without which the progress of invention must be tardy and inefficient. All our recent and magnificent improvements in a large proportion of our branches of national industry have been brought about, not by mere practice, but by important discoveries in the various departments of natural science; yet, we are ashamed to say it, while theology and law lead to high preferments and large emoluments, science, on which our national wealth is founded, often leaves her votaries in a very unpleasant pecuniary position.

We are, however, rejoiced to perceive the dawn of a brighter destiny for scientific men. Two unprecedented, but gratifying events, in the history of science have occurred during the past six months: the one, that a Royal residence has been conferred on Professor Owen; the other, the appointment of Professor Playfair as Gentleman Usher to Prince Albert. We sincerely hope that these two gentlemen will not forget the duty they owe to the scientific community in pressing on those in power the miserably inadequate rewards held out to men who devote their lives and energies to the investigation of nature.

We cannot conclude this article, without expressing our fervent hope and reasonable expectation, that all members of our Profession who possess the means of assisting this good work, without injury to themselves or families, will cheerfully contribute to this most desirable object, and that the Committee will have the pleasure of fulfilling their beneficent intention.

MEDICAL MEN IN PARLIAMENT.

We are happy to be able to state, that there is a probability of another Scotch borough being represented in Parliament by a medical man. Mr. Hartley Kennedy, a retired officer of the East India Company's service, and author of a "Narrative of the Campaign of the Army of the Indus," of a well known work on Cholera, and other volumes, was defeated at Inverness in 1847, under circumstances which have justified the hope of better success this time; and, having received a requisition, signed by 150 electors of Inverness, inviting him to a public dinner, and to offer himself again, he has canvassed the borough, and, to judge from the columns of the *Inverness Courier*, with good expectation of success. At the dinner, which came off on the 17th, Mr. Kennedy spoke with great effect; and his address, issued on the 19th, expresses his belief that a majority of the electors are desirous to support him.

Did our space permit, we would willingly quote from Mr. Kennedy's eloquent oration; but, as we cannot do so, we must hope hereafter to refer to speeches "in another place." As in the case of Dr. Whyte, we would entreat our brethren in Inverness to put their shoulders to the wheel, and to aid in Mr. Kennedy's return. It is the cause of the Profession at large which they will aid by so doing. Nothing will enable us to make any improvements and progress without representatives of our own in Parliament.

Does any one earnestly desire a great reformation in the Profession? Does any one wish that its privileges should be cared for and its rights respected? The way to attain these ends is to send medical men to Parliament. It is an object we should all try for; and there are many boroughs where, if the medical practitioners were united, they could return the members.

Apart from this, however, we wish Mr. Kennedy success, for his own sake. He is the eldest son of the late General Kennedy, C.B., a distinguished Indian officer, who died in command of the southern division of the Bombay army in 1831. Mr. Kennedy was educated in Glasgow, and joined his father, who was then the Private Secretary of the celebrated Governor Duncan, in 1811. His long career, until he retired in 1843, was always marked by the strongly recorded approbation of his superiors. His employments were, however, chiefly administrative and civil, rather than professional, and for the past twenty years he has been actively occupied with commercial pursuits, and was the capitalist of a native firm, and a Director of the Bank of Bombay, in India. Since his residence in London, he has continued these occupations, and is well known in the City as the active Deputy-Chairman of the Oriental Bank and of the Great Britain Life Assurance. He is a man of sterling worth, of great acquirements, and of lengthened experience. He will do honour to the ancient borough of Inverness, and will represent its interests with zeal.

Apropos of the returning of scientific men to Parliament, we are able to state on good authority, that some members of the present Government are disposed to extend the franchise to scientific corporations and to collegiate institutions. This would be a great boon, and would gain them many supporters. Those corporate bodies who have already commenced moving in this direction should not relax their efforts, but should urge on the Government in this direction as much as possible. A little *scientific* agitation will do good.

TESTIMONIAL TO DR. CONOLLY.

We are glad to perceive, by an announcement in our advertising columns, that the Testimonial raised by public sub-

scription to that distinguished physician and philanthropist, Dr. John Conolly, will be presented next Wednesday, at Willis's Rooms, the Earl of Shaftesbury in the chair. We are authorised to say, that the presence of any of Dr. Conolly's professional brethren, whether subscribers or not, will be considered a compliment. We venture to promise such as may be inclined to attend, a treat of no slight kind in the proceedings likely to take place on the occasion, not to mention the view of a work of art that has rarely been equalled in this country.

MR. LAWRENCE.

"We are authorised to give unqualified contradiction to a report, extensively circulated, that Mr. Lawrence, of Whitehall-place, is seriously ill. He has been occupied in his professional practice, without a single day's interruption, and is at present in excellent health."

So says the *Times* of Thursday; and so might we have said weeks ago, if we had thought it worth while to contradict an idle report, originating in a slight and passing indisposition. This distinguished surgeon never was in better health nor "finer feather" than at present. Long may he so continue. Great and irreparable would be his loss to St. Bartholomew's Hospital; while his retirement from practice would be signally regretted, both by the Profession and the public.

REVIEWS.

On the Fallacies of Homœopathy, and the Imperfect Statistical Inquiries on which the Results of that Practice are Estimated. By C. H. F. Routh, M.D., M.R.C.S., Physician of the St. Pancras Royal General Dispensary, etc. etc. 8vo. Pp. 85. London: Lewis. 1852.

Facts are the foundation of the science of medicine; figures the enumeration of facts; to sneer at the employment of the latter, then, is simply absurd.

Our knowledge of the existence of facts is ascertained by observation, hence the truth of the well-known aphorism of Baglivi; having learned the existence of facts, we draw conclusions from them by induction and comparison. By induction, however, we never render a conclusion more than highly probable; we infer that the sun will rise to-morrow because observation has shown that it rose on the mornings of a host of preceding days; the inference in this case is in the highest degree probable, but still only probable. The more numerous the facts on which the induction is founded the greater the degree of its probability, hence the use of figures is indispensable to express the number of our facts; to learn ourselves, and to enable others to appreciate, the value of the conclusions we draw.

If while using a given remedy a certain per centage of persons recover from any disease, while a far smaller per centage of persons recover from the same disease while using another remedy, the inference is, that the latter remedy is inferior in curative power to the former.

In arriving at this conclusion, we have made two inductions, and then compared the inferences. We have inferred, that is to say, that under the use of the first drug the same per centage of persons suffering from the same disease would again recover; and have pursued the same process of reasoning with reference to the second drug; and then compared the figures expressing the inferred constant results from the employment of the two drugs. Now, supposing that the drug used in either case were the same; the individuals treated the same in all appreciable particulars,—age, sex, and constitution; the disease under which they laboured essentially the same, and the external circumstances by which they were affected, *e. g.*, diet, temperature, season, etc., generally the same, then the results obtained, supposing the persons treated to be tolerably numerous, would probably be nearly correct; the two might be compared, and so a conclusion be drawn by simple enumeration and a comparison of the figures obtained.

To detail all the circumstances that would mar the correctness of the results would far exceed our limits; to those who feel interested in the matter, we strongly recommend the perusal of Dr. Routh's pamphlet. The mortality from pleurisy, say the homœopaths, in our hospitals, is 3 per cent., while in the hospitals under the care of regular physicians the mortality from pleurisy may be seen to be 13 per cent.; and then comparing these results, they claim the merit of curing by globules 11 per cent. more than we can by the remedies ordinarily in use.

Now, Dr. Routh shows, that in the returns of the homœopaths cases of pleurodynia are included—a disease which, every one knows, has no tendency to produce death—it is clear, then, that the homœopaths and physicians do not mean the same disease by the name pleurisy, for the former include under the term a class of mild cases which we exclude; and hence no conclusion can be drawn, as to the comparative curative powers of globules and bloodletting, say, by adding up the deaths and recoveries of cases called pleurisy by the homœopaths and those so called by physicians, and comparing the mortality of the two sets of cases.

The general mortality in our hospitals, say the homœopaths, is 4·3 per cent.; in the hospitals under the care of physicians it is from 7 to 10 per cent. But it seems that the homœopaths exclude from their reckonings all cases brought into the hospital moribund, while the same set of cases are included by physicians. Again, mild cases are admitted—Dr. Routh speaks on this point from his own experience—into their hospitals, which would never find a bed in ours.

They do not take into account the size of the hospital: yet we know that the mortality is greater in the smaller hospitals in London than in the larger, because mild cases are admitted into the latter which would be excluded, necessarily, from the former. The influence of this circumstance is well shown by the following facts and figures:—The admissions into the London Hospital, from 1835 to 1841, ranged between 2735 and 3339 per annum; the mortality for those years being between 14½ and 9 per cent., the average 10·8 per cent. From 1841 to 1849, the admissions ranged between 3500 and 4159, and then the mortality was between 6 and 8 per cent., the mean being only 6·8 per cent. Again, the smaller hospitals, like those of University College and King's College, having large schools of medicine attached, will also necessarily have a large mortality, because the cases admitted will be selected, for the purpose of clinical instruction, on account of their severity, and the acute cases will bear a large proportion to the chronic.

From this we see the absurdity of the homœopaths and others drawing inferences in regard to the science of medicine from crude statistical inquiries: to solve any one medical problem, complex analyses are essential; simple enumeration gives the most fallacious results.

Into the "quicksands of false arithmetic," to use the expression of Dr. Arnott, of Dundee, men of small caliber who venture to talk statistically on matters they do not understand are pretty sure to fall; and into these quicksands the homœopaths have already sunk up to their necks, too far, we fear, ever again to reach the *terra firma* of sound induction.

We strongly recommend those who have homœopaths preaching fallacies to their patients or friends to study Dr. Routh's book, for in it they will find much sound argument and numerous *real* facts; and all who have been startled by the bold assertions of these men as to their success, will here find a complete explanation of the means by which their apparently favourable results were obtained.

Hydropathy as applied to Acute Disease. Illustrated by Cases. By T. R. Armitage, M.B. 8vo. Pp. 178. London. Churchill.

As a system of quackery, the more modern hydropathy rivals, if it does not exceed, the danger and fatality of homœopathy. It is, however, due to the author of this unpretending work to state, that he is no hydropath nor is his book a quack advertisement. For the hundredth time we must reiterate the notorious fact, that what is now known as hydropathy, the universal panacea of an ignorant peasant, has been for centuries a valuable adjuvant to the therapeutics of legitimate medicine. It has, indeed, fallen into a subordinate position, but it has never really been absent from our Pharmacopœia; and we cannot but think

that the Profession is greatly indebted to those who, risking the misinterpretation but too likely to be assigned to their motives, thoroughly investigate the claims of the system. Homœopathy—the grossest scientific delusion that ever gulled an over-taught and under-educated public—has had this investigation long ago. Hydropathy is daily receiving it.

The author before us is a talented young physician, whose clinical attainments render his statements quite trustworthy. His book shows him to have visited most of the German hydropathic establishments, and to have thoroughly studied their details; while some unusual opportunities at a large hospital in Berlin were eagerly laid hold of by him as a means of testing this plan of treatment in acute diseases—chiefly typhus, pleurisy, and pneumonia. The following are his chief results.

As regards the hydropaths themselves, he finds that their powers of diagnosis are utterly unworthy of confidence; and that frequently, all the knowledge afforded by common sense, or acquired by a fatal experience, are insufficient to prevent them from committing grave errors in the application of their treatment.

In pneumonia, he finds it, on the whole, extremely inferior to the ordinary antiphlogistics.

In fever, he finds that the duration of the disease is little affected, but that the delirium and stupor are greatly relieved, and the general per centage of recovery a high one. Prostration and extreme diarrhœa do not contra-indicate its use.

The value of the different forms of applying water are thus stated:—The douche is stimulant, the warm bath sedative; hence the former is useful in stupor, injurious in delirium, where, *vice versâ*, the latter is the means indicated. Between these extremes of the hydropathic scale, we pass from the douche, the affusion, the mixed bath and affusion, the wet-sheet packing, to the warm-bath; each of these gradations being more sedative, and less stimulant than that which preceded it. He particularly estimated the effect by careful thermometric examination, which often showed a cooling of one or two degrees of Fahrenheit, as the immediate result of the bath. We think it worthy of notice, that Dr. Armitage regards a permanent and marked increase of temperature as the only symptom which can justify or indicate the application of cold water in *acute* disease.

On the whole, then, we can so far recommend this work to the Profession, as to say, that they will find it an interesting, and, in some respects, original contribution to our knowledge of a valuable agent. It is anything but an elaborate book; perhaps too little so. It forms strictly a medical narrative, which, though unreadable by the general public, to whom books of this class are often addressed, will be found useful and agreeable reading by any man acquainted with clinical medicine.

Remarks on the Climate and the Principal Diseases of Belgium. By James Millman Coley, M.D., Physician to the British Embassy, etc. Brussels: Meline and Co. London: Renshaw, 356, Strand.

Clearly and practically written, this work deserves perusal; while the unassuming and easy style of its composition cannot fail to please. It is chiefly addressed to the general reader, but medical men who practise in Belgium may derive information from its perusal.

The topography of Belgium, its sanitary regulations, and hospital arrangements, and the description and treatment of disease, are such as warrant us in directing attention to Dr. Coley's work.

PROVINCIAL CORRESPONDENCE.

IRELAND.

CHEAP PHYSIC.

Economy is the order of the day, and certainly by no department are more strenuous efforts made to frugally husband resources than by the administrators of the Irish Poor-law, and in no item of expenditure is more rigorous care bestowed in reducing figures to a minimum than in the remuneration of medical services to the poor. Boards of Guardians seem to vie with each other in economic contest, with the generous purpose of finding the lowest values of the medical man's time and labour; as to considering his qualities of head or heart, we are confident it never enters into the calculation by any chance. We have long been anxiously watching the proceedings of the various Boards under the New Dispensary Act, we have seen advertisements for a medical officer at a miserably low salary in one district, followed by a reduction of 20 per cent. in the remuneration offered by a rival Board of Guardians in a neighbouring locality. Painfully alive to the necessities of the junior members of our Profession, we have asked ourselves, where, in Heaven's name, is this sliding scale to stop? If to-day, the medical, surgical, and midwifery duties of a country district, with preparation and dispensing of medicines, vaccination, attendance on Bridewells, and evidence in cases of pauper lunacy, be discharged for 40*l.* per annum, who shall say that half that sum will not be considered extravagant remuneration in some other country? Competition is the life of trade, say these economists. But we protest in the most solemn manner against this free trade in brains. If the Poor and the Union-rates need guardians, the surgeon and the physician, *quorum virtutibus obstat res angusta domi*, are a thousand times more in need of protection from this infamous and heartless trading on their poverty and pressing wants. We have before repeatedly urged the claims of our brethren in Ireland; we have pressed them on the consideration of the Irish Medical Commissioner. In his hands are full measures of redress, and if he fail in his duty he deserves to be held up to the execration and reprobation of every physician and gentleman in the land. It will, we know, be urged in defence of this wretched scale of remuneration, that the salaries of the English Poor-law surgeons are very low. It is true that they are nominally so, but what are the whole facts of the case? In addition to the regular salary of 40*l.* or 50*l.* a year, there is a fee of 10s. for each midwifery case within two miles of the residence of the medical officer, and 12s. 6d. if beyond that distance, there is an allowance of 1s. 6d. for vaccination, and certain fees for accidents. In Ireland, on the contrary, the whole and sole remuneration is that annually paid by the Board, and the duties, as specified in the Act, embrace medical, sorgical, and midwifery attendance, compounding and dispensing of medicine, vaccination, attendance on Bridewells, and the examination of dangerous lunatics. We await the Commissioner's decision on the salaries allocated for such various and onerous duties in certain localities. The following abstract will give our readers an excellent example of the manner in which medical services are considered in the sister kingdom:—

"• • • • Union. The Guardians of the above Union will at their next meeting appoint the following officers, viz.,—

Medical officer at 40*l.* per annum.
Schoolmaster at 15*l.* per annum } with apartments and
Schoolmistress at 12*l.* do. } rations.

Applications in the handwriting of the candidates, enclosing testimonials as to character and competency, will be received by me, • • *. A married couple for the offices of schoolmaster and schoolmistress would be preferred.

"By order, "• • •, Clerk of Union.

"March 5, 1852."

Here we have an excellent comparative view of the value set on medical services. We have not the slightest hesitation in saying, that, as far as the comforts of life are concerned, we should certainly prefer the office of schoolmaster with his rations and apartments, unless, indeed, we could be so fortunate as to fill both offices, to which view, we suppose, the Board could not raise any objection, especially as it would afford opportunities of still further reducing the salary of the medical officer on a future occasion. The words which we have put in italics imply a graceful compliment to the medical educational institutions of the kingdom.

GENERAL CORRESPONDENCE.

TYPHUS AND TYPHOID FEVERS.

[To the Editor of the Medical Times and Gazette.]

Sir,—In Dr. R. Dundas's Sketches of Brazil is the following statement with reference to my cases of typhus, typhoid, and relapsing fevers, published in the *Medical Times* of 1849, '50, and '51:—

"I have lately looked over with attention the cases so carefully observed, and so fully and ably reported by Dr. Jenner, and I must confess, that to me they afford no sufficient evidence to support the doctrine of distinct poisons in the different forms of continued fever."

And in proof of the assertion, that the cases offer no support to the

want of identity of typhus and typhoid fevers, Dr. Dundas makes the following criticism:—

"Case 35 has 'typhoid fever,' while her mother, aunt, brothers, and cousins are all suffering from 'typhus fever.'"

Now, Sir, I find Case 35 is that of a girl named Emma Temple, and is contained in the Eleventh Paper, which paper is headed thus: "Symptoms of perforation of the intestine without the existence of that lesion," and is prefaced with the following remarks:—

"With reference to the second of the two cases here recorded," (viz., Case 35) "this may be observed—that, as the girl had been exposed to the contagion of typhus fever, had no examination of the body been made, she might have been supposed to exhibit an exception to the law, that the contagion of typhus fever never produces typhoid fever."

The case itself is headed—

"Case 35.—In a girl aged 16 years, the fifth day after the termination of typhus fever," etc. etc.

In the account of the appearances found after death are the following passages:—

"There was no enlargement of the mesenteric glands."

"Peyer's patches were perfectly healthy in colour, thickness, and consistence."

The paper was written to prove that all the symptoms usually said to indicate perforation of the intestines might be present, and yet an examination after death demonstrate the absence of that lesion; and it concludes with the following paragraph:—

"In the case of Emma Temple—Case 35—all the symptoms said to denote the occurrence of perforation of the intestines were also present, but, in her case, an examination after death proved those symptoms might exist without any traumatic lesion of the peritonæum, *i. e.*, idiopathic inflammation of the peritonæum may supervene during convalescence from typhus fever."

I think, after these quotations, your readers will agree with me that Dr. Dundas should have looked a little more attentively at the cases before he criticised them.

I may remark, in conclusion, that the cases in the *Medical Times* were intended only to illustrate the different fevers of this country, and not to prove the non-identity of typhus, typhoid, and relapsing fevers.

I am, &c. W. Jenner, M.D. etc.

THE STATISTICS OF MORTALITY IN PUBLIC INSTITUTIONS.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your Correspondent, Mr. B. Smith, has stated only partially, and therefore incorrectly, the mortality in the London hospitals. As it is of importance that the case should be clearly stated, I beg you to admit the following remarks on Mr. Smith's figures. I select three hospitals from the mass, and shall quote in the first instance the Registrar-General's Return, as given in the *Medical Times and Gazette* of February 28th.

	Total cases discharged, cured, or otherwise during the year.	Average Term of Residence in Institution.	Average number of Inmates in Hospital.	Deaths.	Deaths to One Hundred Cases.	Deaths to One Hundreds Beds assumed to be occupied continually.
University College	1105	28	86	116	10·50	134·88
King's College ..	1213	32	106	120	9·89	113·21
Guy's	4530	88	475	424	9·36	89·26

The mortality in University College Hospital during 1851 was as 116 to 1105 or 10·5 per cent.; in King's College, as 120 to 1213, or as 9·89 per cent.; in Guy's, as 475 to 4530, or as 9·36 per cent.

Mr. Smith, however, has only selected three columns from the Registrar-General's return, viz.,

	Average Inmates during the Year.	Total Deaths.	Annual Mortality per cent. of Average Number of inmates.
University College	86	116	134·88
King's College..	106	120	113·21
Guy's	475	424	89·26

If these three columns are severed from the rest, any one might suppose that the mortality in the three hospitals had been very different. But the calculation in the last column is merely intended by the Registrar-General to express the fact, that if at University College, during the year 1851, the average number of patients at a time in the hospital was 86, and if the number of deaths in the year were 116, then, if there were always 100 patients at a time, the annual number of deaths would be 134·88.

Thus:—For University College:

As 86 : 116 :: 100 = x viz. 134·88.

For King's College:

As 106 : 120 :: 100 = x viz. 113·21.

It is difficult, however, to see what fact the Registrar-General intended to bring out by this calculation. It appears to start, indeed, from unstable data. Thus, the number of admissions at University College during one year being 1105, the number of deaths 116, the average number of inmates 86, and their average stay in hospital 28 days, the actual mortality was of course 10·5 per cent., and the mortality to 100 beds, occupied continually, would have been 134·88. But, suppose that only half the number, or 43 patients, were in at one time, that each remained in only 14 days, or half the time, the admissions would remain the same; and, if the deaths were the same, then we should have the mortality exactly the same, viz. 10·5 per cent.; but the mortality to 100 beds, occupied continually, would be 269·76 per cent. Or turn it the other way. Let the annual mortality in University College remain at 116, and the average number of patients be 86; but suppose that each patient stopped in double the former time, or 56 days. The number of admissions would necessarily fall to 559, which would be the greatest number the bospital could then accommodate. The actual mortality would then rise to 20·73 per cent., but the annual number of deaths to 100 beds occupied continually would remain still at 134·88. Or, lastly, suppose, with the Registrar-General, that 100 beds were occupied continually, and that each patient remained in 28 days, then most undoubtedly there would be 134·88 deaths; but, as the number of admissions would also be augmented by 14 in each month, or 182 in the course of the year, the per-centage of mortality would be of course the same, viz., 10·5 per cent. In the case of King's College, the annual number of admissions would diminish by 69, and the mortality would also proportionably fall. To say, then, that if 100 beds were occupied continually in University College, (the average stay in hospital remaining the same,) there would be 134, instead of 116 deaths, in the course of the year, is merely to say, that if 182 more patients were admitted, as must then be the case, there would be a proportionate augmentation of deaths. It may be difficult at first to follow this statement, since any one would be puzzled by the method adopted by the Registrar-General, of re-stating in another form the per-centage of mortality already given in the usual way, viz., by calculating the number of deaths to the number of admissions in a given time. This unusual method cannot apparently bring out any facts not disclosed by the other calculations, and it may lead to misapprehension. An instance of the way in which it may lead to inaccurate expression may be quoted. Mr. Smith says, the special hospitals, (viz., Small-pox, Fever, and Consumption,) "during the past year, have suffered a mortality of 100 per cent.;" that is, in fact, to affirm, that every patient died who entered these hospitals. The actual mortality of these hospitals was 11·48 per cent., and that of the general hospitals 7·7 per cent.; *i. e.*, of every 100 patients who entered a general hospital, 92 (in round numbers) were cured or relieved. The statement of the Registrar-General, which Mr. Smith has expressed thus vaguely, is, that, in the special hospitals, the annual mortality, if 100 beds were occupied continually, and if the average time spent in hospital were the same, would be 100.

The general question of the greater mortality in small hospitals has been satisfactorily disposed of in Dr. Hare's excellent letter, alluded to in your last Number. I have no wish to reiterate his arguments, but, if the subject is again mooted, I trust that statistics may be properly used, and that the full meaning and import of the figures may be understood. I have met with several persons who, from not understanding the peculiar calculation of the Registrar-General, have supposed that the mortality at University College was something excessive, whereas it has been, during the last year, merely a shade higher than that of King's College, St. George's, and Guy's.—I am, &c. E. A. Parkes, M.D., Lond.,

Professor of Clinical Medicine in University College.

THE FINAL CAUSE OF MENSTRUATION.

[To the Editor of the Medical Times and Gazette.]

Sir,—I am somewhat surprised that Dr. Ramsbotham's letter, in your Number for the 28th ult., has not been replied to. As this

subject has deservedly attracted much attention, and is one of great interest, perhaps I may be excused soliciting space for a few additional remarks.

It seems to me, that this hypothesis, concerning the formation of the deciduous membrane by the menses, is grounded on one or two coincidences, and that the rest of the question is begged. The general opinion is, that impregnation usually occurs about or after the cessation of the catamenial discharge, and not at or a little previous to its appearance, and this is favoured by analogy. I am aware that it has been stated, that conception in the lower animals "is said to occur during the heats, not after, which is generally true in females;" and Dr. Ramsbotham, with many others, believes they do not menstruate; but certainly the period of heat is very similar, if not identical. Dr. Roods has instanced some cases in his letter, where a discharge occurred in the bitch. Neither is this at all an unusual or unnoticed circumstance. Dr. Carpenter alludes to "the sero-sanguinolent discharge at that period." Now, most of those persons who are familiar with field sports and agricultural operations, and who have narrowly watched the condition of various domestic animals, will bear me out in the assertion, that these heats are periodical, and invariably attended by a certain discharge analogous to menstruation, and, so far as appearances go, in some cases identical, and that impregnation in cows, mares, bitches, and sows (and I think in other animals, but I know less about them) takes place most readily about the time of the decline of these "heats." The groom with a stallion prefers the mare being covered, not before or during the first part of the time she is "horseing," but near the end of the process. If this be the case, does it seem probable that Nature would throw off this discharge, and then in a short period have to form fresh to prepare the decidua? If impregnation takes place either at, or a little previous to, a catamenial period, a sufficiency of fluid, according to Dr. Ramsbotham, is thrown out to form the decidua, and something to spare; but, should it occur after, or in the intervals, no menstrual discharge can be perceived; but by this hypothesis it must be present, and so it is begged that this secretion does take place, but that Nature accurately throws out sufficient to form the decidua, and no more. Still, if impregnation occur in the intervals, the discharge very frequently appears at the next menstrual period, sometimes increased in quantity, though more frequently diminished. Are we to presume that, in the latter case, the discharge which was thrown out at impregnation and entirely retained was not sufficient for its purpose, and that in the former it is all superfluous? or are we to suppose it then proceeds entirely from the upper part of the vagina? If the purpose of the menstrual fluid be merely to form the decidua, why do we frequently find that menstruation occurs during the first months of pregnancy? or when secreted only during pregnancy, as in some few cases, what can its purpose be then?

Is not the fact, that the menstrual fluid is non-fibrinous, a strong presumption against its being the foundation of a membrane; and if, as has been stated, we must account for the continuance of menstruation during the early months of pregnancy, by supposing the discharge comes from the upper part of the vagina, why, in these cases at least, does not the decidua extend into the upper part of the vagina? for the mucous membrane is continuous, and secretes a similar fluid. Then, again, supposing that the decidua were formed from the menstrual fluid, how is it the decidua reflexa and vera have not precisely the same structure? Dr. Sharpey found in the bitch, and Bischoff in the human female, that the deciduous membrane was merely the lining membrane of the uterus altered and modified; but is it not probable that under the increased excitation of the vascular system of the mucous membrane, a quantity of liquor sanguinis is exuded, and forms an inner lining—the decidua reflexa? and by this the openings of the cervix uteri and Fallopian tubes are closed, when they are found so, which, of course, is not invariably the case; and would not this account for the recorded difference in structure, and be analogous to the changes we observe going on on the surface of the true skin?

In Dr. Lee's well-known case of extra-uterine pregnancy, the ovum was found in the right Fallopian tube, and had a decidual membrane, while the uterus had none; but, according to Dr. Ramsbotham's views, this could not have been. I know that it is almost an invariable rule, that even in these cases the decidual membranes are present in the uterus, but this is perfectly explicable on the former theory. In another of Dr. Lee's cases the uterus had a thick layer of yellowish white substance like adipose matter, totally differing in appearance from the true decidua. Does not this seem like those cases, in which, when a blister has been kept for a long period in certain states of the system, we find a somewhat analogous cacoplastic exudation—not true serum, but a semi-opaque softish yellow substance, which seems rather a morbid production of the true skin, than the exudation of the watery part of the blood?

As to the use of the menstrual fluid, it seems still to be an undecided point. Perhaps it may be to act as a blastema to the ovum, enabling it to retain its vitality for a certain time; but be this as it may, Dr. Ramsbotham's hypothesis seems to me inadequate to explain all the circumstances, and can only be supported by supposing a great deal to occur that it would be very difficult to prove.

I am, &c.

H. Scholfield Johnson, M.D., M.R.C.S.

Camberwell New-road.

ABNORMITY OF THE KIDNEY.

[To the Editor of the Medical Times and Gazette.]

Sir,—The following case of coogenital misplacement of the kidney may possibly be worth the notice of some gentleman interested in such irregularities.

At the *post-mortem* examination of a male patient, aged 33, (who died during a maniacal attack), the left kidney was observed to be smaller than the right, and situated partly in the pelvis, but chiefly in front of the lower lumbar vertebræ. Its upper margin reached to the cartilage between the 3rd and 4th lumbar vertebræ, and was to the right of the mesial line; the lower portion was situated in the pelvis. Its anterior surface (convex) was divided by a deep transverse fissure into two unequal lobes, the upper being much the smaller both in length and breadth. In the fissure were lodged, enumerating from before backwards, an artery, a branch from the aorta, passing downwards behind the rectum; the renal vein; and a renal artery. The posterior surface (concave) was marked above by the anterior surface of the vertebræ, below by the ileo-pectineal line denoting the portion which was hanging in the pelvis. Its arteries were two in number; one, corresponding in origin to the middle sacral, after giving off a small branch, passed to the kidney in the groove on the anterior surface behind the vein, as before mentioned; the other, and larger, derived from the right common iliac, passed in at the upper part of the hilus above the ureter. The ureter entered the hilus at its lower part, and divided into two branches, one entering the lower lobe behind the artery and vein, the other the upper lobe in front of them. The renal vein entered the vena cava at an acute angle.

The aorta bifurcated opposite the lower margin of the 3rd lumbar vertebra.

The right kidney was in its usual situation.

I am, &c. Bernard Rice.

Littlemore, near Oxford.

ON THE MODES OF DISTINGUISHING URIC ACID FROM URATE OF AMMONIA CALCULI.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having had occasion lately to analyse a rather considerable number of urinary calculi at University College, one of the most frequent problems in the course of this analysis was to decide whether a given calculus was composed of uncombined uric acid, or whether this acid was in combination with ammonia; and, having had certain misgivings as to the sufficiency of the statements of the various works on animal chemistry, I resolved to examine into the subject myself, and lately had the honour to lay the results of my inquiries before our College Medical Society. In that communication I first enunciated the various tests, and then appended to each my own remarks.

"1. Urate of ammonia is distinguished from uric acid by evolving ammoniacal fumes in treating the fragment of the calculus with caustic potash." This test is often not available in determining the character of the necessarily small quantities the analyst of calculi has to deal with; besides, uric acid itself, in common with other nitrogenised animal substances, might of itself evolve ammoniacal fumes on being treated with a concentrated solution of potash.

"2. An aqueous solution of uric acid does not give the murexide test; an aqueous solution of urate of ammonia does." This statement requires qualifying, in so far that, while this is true of cold solutions, it is not true of boiling solutions, which give the test with both the substances under consideration.

"3. A cold aqueous solution of uric acid yields no precipitate on the addition of hydrochloric acid; a similar solution of urate of ammonia does." This is perhaps the best of all the tests yet mentioned, though it is omitted in many books.

And, lastly, I have to add a test which, long applied as it has been to the recognition of urinary deposits, has not, as far as I am

aware, been made use of in the analysis of urinary calculi. A small fragment of the calculus is reduced to a fine powder and boiled for a minute or so in distilled water, and a single drop of the solution, placed on a plate of glass, examined microscopically. If it be uric acid, a multitude of well-defined crystals make their appearance as the drop cools; the various forms of these crystals are well figured in Bowman's "Medical Chemistry." Should, on the contrary, the substance be urate of ammonia, no crystals are seen, but those amorphous aggregations of globules, generally of a brownish tint, so familiar to the examiner of urinary sediments, will be perceived. Even the naked eye will readily distinguish the glistening crystalline precipitate of uric acid from the dull amorphous one of urate of ammonia. It is only in solutions of urate of ammonia which have stood for some time that I have been able to detect crystals, which were then of an entirely different character from those of uric acid. In conclusion, I beg to remark, that while this last test does not yield to any of the others in delicacy and precision, it will solve a problem which none of the others can do, namely, that of detecting mixtures of the two substances in question. I am, &c.

JOHN ZACHARIAH LAWRENCE.

THE UTERINE SOUND.

[To the Editor of the Medical Times and Gazette.]

SIR,—Dr. Higgins has pointed out a serious typographical error in my letter inserted in your Journal for February 21. The bulb of the uterine sound is stated to be "half an inch in diameter;" it ought to be, half an inch in circumference. The measurement Dr. Higgins gives—one-eighth of an inch in diameter—is, however, a little within the size, as tested by three instruments at present before me, two of which were made in London, one in Edinburgh. However, this typographical error does not in any way alter the facts commented upon, *i.e.*, that when the uterine sound can be introduced two inches and a half, the orifices of the uterus, external and internal, are morbidly dilated, not contracted, and will offer no obstruction to the flow of the catamenia. Hence the pain experienced during the presence of this function could not have arisen from the contraction of these orifices, as it was said; and the employment of any means to increase the morbid dilatation was uncalled for, and consequently improper.

Unless Dr. Higgins objects to discuss with one who prefers to remain unknown, I will consider with him "what class of cases, and under what circumstances, it is proposed to employ the uterine sound." And as such a discussion can only be considered in reference to the facts themselves, he will pardon me if I pass over all expressions of opinion, and examine the cases upon which these opinions are founded.

The first case mentioned by Dr. Higgins is that of a young lady who "had been uselessly subjected to all sorts of powerful treatment," and who would have been benefited, "but unfortunately" she was not—she died.

The next was a lady who had suffered for six years from dysmenorrhœa, and in whom the "existence of a constricted condition of the os internum was ascertained by the sound." I have already said, and now repeat, that the bulb of the uterine sound will not pass the os internum in the healthy uterus, and hence it is impossible to ascertain a "constricted condition" of this canal by this instrument. Then follows a reference to the cases published by Dr. Rigby, and which have been already commented upon in my former letter; and it is obvious from that examination that they are examples of an improper use of this instrument.

The following case was a relation of Dr. Higgins, in which "the uterine sound, early employed, would have anticipated much of the injudicious treatment," "but unfortunately" it was never used! "Speedy relief" was obtained by "appropriate means" to support the "womb." Next follows a case seen in the United States,—a case of retroversion, wherein the sound was used for "making and unmaking" the displacement. No doubt the sound removes the retroversion, but the organ directly falls back on the withdrawal of the instrument; hence where is the practical use of employing it?

The subsequent case was a little more complicated. A lady suffered for six or seven years from anomalous and distressing symptoms. Displacement of the womb was detected by "finding the os uteri abnormally forward," and "perceiving a tumour" when the finger was introduced into the rectum. This opinion was "confirmed" by the uterine sound; but why was it requisite to confirm an opinion already evident by a former examination? Also, "an enlarged and hypertrophied condition of the organs was discovered." Surely the previous examination must have been made with much want of attention, not to have discovered this previously; for it is a fact, concerning which there can be no dispute, that, in displacement of the uterus, the size and condition of this organ can be accurately ascertained with the finger, without the risk of introducing a metallic instrument into its cavities. The uterus was reduced and maintained "in situ by an appropriate pessary." Where was the necessity to employ the sound? The case of Dr. Higgins' relation, previously mentioned, was equally successful by the use of the pessary alone. "Under medical treatment, the enlarged state of the womb gradually disappeared, and the improvement of the general health and comfort of the patient was as rapid as remarkable." Here is the pith of the case. By medical treatment the enlargement was removed, and the general health rapidly improved,—could there be a more forcible commentary on the unnecessary employment of the sound?

If these be the class of cases which are brought forward to justify the use of the uterine sound, I may well leave the general condemnation of it to the practical good sense of the Profession. But it has been employed to diagnose "between internal uterine polypi and inversions of the organ;" and how is this to be accomplished? The one disease differs, so far as the sound is concerned, only in the size of the pedicle, which may be large in a polypus as well as in an inversion. I have seen the diagnosis of tumours internal to the uterus thus attempted and made in two instances. In one, an accomplished accoucheur and an author of some repute on uterine disease examined, in consultation, a case, and diagnosed a large pendulous tumour of the fundus of the uterus. In some few hours after their examination, the "pendulous tumour" was making a great noise, in the shape of a fine male child. The other case occurred within the present year, a physician accoucheur, attached to one of the largest hospitals in London, also diagnosed a pendulous tumour by the aid of the sound in a patient I had previously considered pregnant. After a time, this tumour also resolved itself into an abortion about the third month.

I may pass over the use of the sound as a means of determining the recent delivery of a woman; for there are so many obvious means of obtaining this knowledge fully adequate to the object, without the risk of injury which this instrument involves, that its employment in every case appears a work of supererogation.

There remains, then, the information which may be gained in doubtful cases of ovarian disease. And here I can suppose that occasional cases may occur, although I have never seen such, in which this aid to diagnosis may be available; but these are a very limited class of cases. I am ready to admit, that, in the hands of a careful practitioner, and in exceptional cases, the uterine sound may sometimes be a useful addition to our other means of examining this disease, but I have yet to learn that its use is warranted in the great majority of cases wherein it has been employed. In the cases related by Dr. Higgins, no injury apparently resulted from its use. But suppose chronic inflammation had been present in the body of the uterus, what then would have followed? In my own practice I have seen severe attacks of acute inflammation follow the introduction of the sound, and others have recorded instances of death.

Let us now suppose, that one of these rare and exceptional cases of tumour has presented itself, and that a more accurate diagnosis has been made by the uterine sound than could otherwise be attained, of what practical value is the information? Does it alter the treatment? Does it render the treatment more potent for good? Certainly not. I lately saw a case of the kind. A fibrous tumour occupied the anterior and right lateral part of the pelvis; and it was difficult to determine whether this was seated in the uterus, or in the neighbouring cellular tissue; but, by introducing the sound, the uterus could be separated from the mass, and felt to be of the normal dimensions. So much for an improved knowledge of the seat of the tumour; but this did not in any way alter the treatment, or otherwise benefit the patient, while attaining it involved the risk of injury to the patient. It is a mistake to suppose that there is no risk of injury to the patient by using the uterine sound. For, although the uterus, on some occasions, will permit of a degree of "poking" and "canterising" which is truly astonishing, yet on other occasions a degree of sub-acute inflammation is set up, and causes great distress to the sufferer for months, and it may be for years, after. May we not affirm, then, that this instrument ought not to be employed except where some information of real importance to the patient can be gained by its use. And what are these cases? Assuredly they are very rare, and are not to be found among those related by Dr. Higgins, if ever they really occur. To form a diagnosis between retroversion and a tumour in the posterior walls of the uterus, it is unnecessary; for that can be arrived at by a careful consideration of the symptoms, aided by a digital examination.

In conclusion, permit me to express an opinion, that the uterine

sound, when fairly tested in pratice, will be considered an unnecessary instrument, which cannot be used without danger, and that it will be allowed to pass into oblivion along with the stemmed pessary and air-tractor.—I am, &c.

M. D. Londin.

PARALYSIS OF THE BLADDER.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have enclosed you a case which I have had lately; if you think it of sufficient interest, perhaps you will give it a corner in your valuable journal.—I am, &c.

Newmarket. Fred. Page, Surgeon.

Nov. 24, 1851.—A gentleman in this immediate neighbourhood, aged 45 years, applied to me with the following symptoms, from which he had suffered for the last seventeen years:—His countenance dull, muddy, with an anxious expression; headache, lethargy; conjunctiva yellow; loss of appetite; indigestion; tongue white, broad, flabby, and tremulous when protruded; great emaciation and prostration of strength; considerable nervous debility,—scarcely able to write his name; sleepless nights; obstinate constipation; general appearance that of a man sinking from some hidden organic disease.

This gentleman had consulted a great number of surgeons and physicians, who, strange to say, all pronounced him to be suffering from some liver disease, and each dosing him in turn with their favourite preparations of mercury, which had the effect of more and more prostrating his strength. Upon minutely questioning him, I discovered that the urine dribbled away in the night; that he had occasion to get up several times in the night to void it, without the power of doing so; but, as this had been so long the case, and he was become so used to it, he thought very little of it,—in fact, so little, that, although he mentioned it to other medical men, little or no notice was taken of it. I suspected paralysis of the bladder, and, upon introducing a catheter, drew off about three pints of fetid urine with considerable relief. Being now convinced that this gentleman's sufferings all arose from the absorption of urine, and the effects of urea upon the system, from a paralysed bladder, I ordered a catheter to be introduced three times in the twenty-four hours, and its use steadily persevered with; and I am happy to say, that at this time all his symptoms have vanished, and that his health is perfectly restored, and that he is gradually recovering the contractile power of the bladder, and a perfect wonder to his friends.

In a practical point of view, this is a case of the highest interest, and proves to what an extent an organ like the bladder can adapt itself to circumstances, and that, when its functions are gradually lost, little or no inconvenience shall be experienced, although it may indirectly prove the cause of death. In this case the patient was quite worn down, and must shortly have fallen a victim, poisoned by his own blood. I may mention that he gains flesh rapidly, (the last two weeks, 10 lbs.)

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. Hodgson, Esq., F.R.S., President, in the Chair.

The library was crowded on this occasion, unusual interest having been excited by the announcement that Dr. Gregory's paper was to be read.

A vote of thanks having been passed to Dr. Seth Thompson, the retiring Secretary,

The President announced, that by an alteration made in the laws at the late anniversary meeting, all the candidates for election proposed after the 1st of March would be ballotted for at the first meeting of the Society in November. All proposed before the 1st of March would be ballotted for and admitted as usual.

A paper was read, entitled—

VACCINATION TESTED BY THE EXPERIENCE OF HALF A CENTURY.

By Dr. GEORGE GREGORY.

The author commenced by observing that variolous inoculation was first heard of at Constantinople, in 1700, but was not practised in England till 1721, and did not become general till 1750. In 1746 the Small-pox and Inoculation Hospital was established; and from this period variolous inoculation made favourable progress in the good opinion of the public throughout England. In France, however, during the same period, it was met with neglect, notwithstanding the efforts of De La Condamine to convince his countrymen of the merits of inoculation; and prejudice extended so far, that the Parliament of Paris, in 1763, prohibited the practice of variolous inoculation within the walls of that metropolis. The author then proceeded to notice the two-fold object with which inoculation was performed: first, to banish from the mind all anxiety as to the taking of small-pox in after-life, by giving it at once; and, secondly, to ensure a mild form of the disease, free at least from secondary fever. Inoculation was eminently successful in fulfilling and attaining these objects. Nevertheless it undoubtedly had its disadvantages: it was essential to practise it in early life, before the infantine constitution could be known; and it thus often lighted up the dormant embers of scrofula. In 1798 the practice of variolous inoculation had been tested by the experience of half a century, In this year Jenner published his first treatise on Vaccine Inoculation, the advantages of which were at once confidently proclaimed; and in the following year 73 of the most eminent physicians and surgeons of the metropolis had signed a document purporting "that persons who have had the cow-pox are perfectly secure from the future infection of the small-pox." The first claims of Jenner in favour of vaccination were singularly modest; but, in 1802, he announced to the House of Commons—1st, "that vaccination is attended with the singularly beneficial effect of rendering, through life, the person so inoculated perfectly secure from the infection of small-pox;" and, 2ndly, "that vaccination had already checked the progress of the small-pox, and, from its nature, must finally annihilate that dreadful disorder." The quantity of small-pox that still prevails, and the practice of re-vaccination almost universal, lead to the conclusion, that these broadly urged claims in favour of vaccination, have not been substantiated. Fifty years have passed since Jenner petitioned Parliament; and the author proposed, by the experience of this half century, to test the merits of vaccination. But, first, what is understood by vaccination? Something prophylactic of small-pox; or something identical with small-pox? Cow-pox is a disease *sui generis*, and it cannot be said that he who has undergone vaccination has had small-pox in a mild form. A certain relationship exists between the two; but though variola by passing through the cow becomes cow-pox, yet cow-pox has never, in its turn, been converted into small-pox. Cow-pox and small-pox are, at all times, and in all countries, clearly and readily distinguishable. The object of inoculation was to give the disease of small-pox, not to prevent it. The object of vaccination is to prevent, not to give, small-pox. Recurring small-pox, and small-pox after vaccination, are not merely different from each other, but actually opposed to each other. "If a person inoculated in childhood contracts small-pox in adult life, he suffers small-pox a second time, but a person taking small-pox after vaccination, takes the disease for the first time." The enemies of inoculation, as well as the supporters of vaccination, had severally taken their stand on recurrent or secondary small-pox. De La Condamine declared that not one person in 10,000 ever took small-pox a second time. The fate of Louis XV. was alluded to, and it was shown that the king's disease in early life (1724) was not small-pox, but a sharp yet brief attack of fever; that living in the constant dread of small-pox, his distrust of inoculation was fearfully chastised by his death under a most aggravated attack of confluent small-pox. The author then noticed the extreme rarity of recurrent small-pox. The "Transactions" of the Society, extending through a period of forty-seven years, contained only one solitary case of recurrent small-pox. In many cases of so-called secondary small-pox, the evidence of antecedent variola could not be relied on, as a case narrated in the *Edinburgh Medical and Surgical Journal*, Oct. 1818, clearly established. Many of the cases which the author had inquired into were equally undeserving of credit. To arrive at a trustworthy conclusion, the details of both attacks should be carefully given. Very few medical men have, in such cases, witnessed both the primary and secondary seizure, and the author emphatically expresses himself as thoroughly convinced that the recurrence of small-pox is among the most rare events in the annals of medicine. The author then contrasted the occurrence of small-pox after vaccination. The records of the Small-Pox Hospital throw much light on this subject. The following is a summary of the statistical details appended to the paper:—During the last eleven years, 4092 persons have been admitted into the hospital, having small-pox, of whom 2168 had been vaccinated, and 1924 were unvaccinated; more than one-half of those admitted had been vaccinated in early life. The majority were of adult age, a few between 9 and 15; but below the age of 9 scarcely any vaccinated person was

admitted. It would thus appear that the susceptibility to the variolous miasm among vaccinated persons increases as life advances. The reverse of that happens in the unvaccinated. In 1850-51 the total number of cases of small-pox admitted was 976, of whom 162 died, being at the rate of 16 per cent. Of the 976 admitted, 41 were infants below the age of 5, all unprotected, of whom 22 died; 101 were children between 5 and 15, majority unvaccinated, of whom 25, or one-quarter, died; 685 were adults from 15 to 30; 109 beyond that age. Total, 794 adults; the larger proportion of these had been vaccinated, of whom 115 died, or 14 per cent. Of the total number admitted—976,—613 professed to have been vaccinated; 569 exhibited cicatrices; of this latter section, 25 died, being at the rate of 4 per cent. In 1851 the proportion of persons admitted after vaccination amounted to 65 per cent.; it was only 44 per cent. in 1841. The increase is attributable to the extensive diffusion of vaccination. The mortality at the Small-pox Hospital during the last two years among the well-vaccinated section has only slightly exceeded 4 per cent. The experience of half a century abundantly demonstrated that small-pox, though it has been largely controlled, will always abide among us, and that the notion of extirpating it is absurd and chimerical; and, while acknowledging the immense benefits which have accrued from the splendid discovery of Jenner, vaccination had failed in establishing in the mind a confident feeling of security; it must be viewed as a beneficient provision of Nature, not for the extermination, but for the mitigation of small-pox. The author proceeded to show that inoculation had been abolished by Act of Parliament in 1840; and that, though rigidly observed, small-pox was just as prevalent now as then; that the quantity of small-pox had not in the smallest degree been affected by the prohibitory clauses of that Act; that, while this Act prohibited inoculation, it did not render vaccination compulsory. Numbers therefore remained as a pabulum whereon small-pox might prey. If the Legislature could not, or would not, enforce vaccination, the restriction on inoculation should be removed. With proper precautions, inoculation might be safely adopted. Practised by other than authorised medical practitioners, it would of course be punishable as a misdemeanour by fine and imprisonment. With such restrictions it might be practised with perfect security. By far the larger proportion of mankind would continue to adopt the mild and safe process of vaccination; while others would prefer that measure which, occasioning a greater amount of immediate, abolished all prospective anxiety. Educated as the present race of medical practitioners were, and acting, as they would act, under the supervision of a discerning Press, both public and professional, they would exercise their judgment to the entire satisfaction, and ultimately to the great and permanent benefit of the country.

Mr. Grainger said it was doubtless known to many present that the Epidemiological Society had appointed a Committee to investigate the important subject of vaccination and small-pox. That Committee had received the opinions and experience of a large number of medical practitioners; and it was deemed essential that some of the more important results should be made known on the present occasion, and he was requested to act as the organ of the Committee. It was obvious that the important points raised by Dr. Gregory could not be determined by any amount of hospital experience; and yet it appeared that a considerable part of the data relied on were derived from the Small-Pox Hospital. The statistics of that Institution, therefore, became important. The following table is from a paper of Dr. Gregory's, in the *Medical Times* for 1849:—

	Total.	Deaths.	Per-centage of deaths.
Unprotected cases	254 ..	103 ..	40
Vaccinated { with cicatrices..	365 ..	38 ..	10
Vaccinated { without ditto ..	63 ..	25 ..	39
Total vaccinated	428 ..	63 ..	14
Previously inoculated ..	3 ..	1 ..	33

It is important to notice that in one-sixth of the deaths, there were symptoms of superadded hospital disease, especially erysipelas facialis; and the weekly returns of the Registrar-General proved that these superadded hospital diseases still continued. The following evidence, taken from thirty returns received from medical practitioners, shows a very different result:—

	Total.	Deaths.	Per-centage of deaths.
Natural small-pox in unprotected ..	1731 ..	361 ..	20·85
Small-pox after Vaccination	929 ..	32 ..	3·44

In an important Report of the "Norwich Board of Health" on a severe epidemic of small-pox, which occurred in that city in 1845, it is stated, that the mortality from small-pox in the unprotected was 12½ per cent., and in the vaccinated only 3 per cent.; and investigation rendered it doubtful, in the latter class of cases, whether all had been properly under the influence of cow-pox. The same Report gives the results of the personal visitation of 531 families, comprising 2170 individuals. Of these, 1664 had small-pox, of whom 1536 had not been vaccinated, while of 506 who escaped, only 84 had not been vaccinated. In the last number of Dr. Copland's "Dictionary of Practical Medicine," it is stated, that, after half a century has elapsed since the discovery of vaccination, "the middle of the nineteenth century finds the majority of the Profession in all latitudes and hemispheres doubtful as to the preponderance of advantages, present and prospective, to be obtained either from inoculation or from vaccination." In reply to this assertion, he would state, that 430 replies to the questions issued by the Epidemiological Society, with the object of ascertaining the opinion of the Profession on the subject of vaccination, had been carefully examined by Dr. Seaton, and one medical practitioner only had expressed any doubt of the protective power of vaccination; and this one doubt only amounted to this,—that having been himself inoculated in infancy, he felt more secure than if he had been vaccinated. He must say, that Dr. Copland, in his opinion, had hazarded a very strong statement on very insufficient grounds.

Dr. Waller Lewis had prepared the following table, showing the decline of small-pox in London from 1750 to 1850, taken from "Marshall" and other records in the office of the Registrar-General:—

Average of deaths from small-pox in London per 1000 deaths, for the ten years ending 1752, 89; for the ten years ending 1756, 95; for the ten years ending 1770, 108; ditto 1780, 107; ditto 1790, 94; ditto 1800, 77; ditto 1810, 63; ditto 1820, 41; ditto 1830, 32; ditto 1840, not known; ditto 1850, 16. Average number of deaths from small-pox per annum in London for the ten years ending 1750, 2036; for the ten years ending 1850, 498.

The number of deaths from small-pox in the former period is to the latter as 4 to 1, while the population of the former period was to the latter probably as 1 to 4.

Dr. Lewis had also drawn up a table, showing similar results in Prussia.

Mortality from Small-pox.

In Berlin, (Caspar's Medical Statistics.)

	Total Deaths.	Small-pox Deaths.	Per 1000 Deaths.	Ratio.
1783—1791 = 8 yrs. ..	47,367 ..	4315 ..	91 ..	10
1814—1822 = 8 „ ..	51,389 ..	535 ..	10·5 ..	1

In all Prussia, (Official Statistical Tables for 1849.)

	Total Deaths.	Small-pox Deaths.	Per 1000 Deaths.
In 1825 ..	327,354 ..	1893 ..	5·8
„ 1834 ..	424,013 ..	6625 ..	15·6
„ 1843 ..	444,573 ..	4508 ..	10·2
„ 1849 ..	498,862 ..	1760 ..	3·5

In the Règlement Berlin, Oct. 31, 1803, (containing the regulations for medical and other public offices, in respect of vaccination,) it is said, that small-pox caused, on an average, 40,000 deaths a year in Prussia. Prussia had at that time a population of ten millions. In 1849, among a population of more than sixteen millions, small-pox killed 1760 persons. Therefore small-pox was thirty-seven times more fatal in Prussia, in 1803, than in 1849.

The high mortality shown in these tables applies to that period of the last century in which the practice of small-pox inoculation had been very actively carried out. He would now state the experience of 435 medical practitioners, relating to themselves personally. Of these 435 gentlemen,—

Had been vaccinated, much exposed to small-pox, and escaped	266
Vaccinated, not much exposed, and escaped ..	34
Vaccinated, and taken small-pox	38
Inoculated, and escaped small-pox	69
Inoculated, but have taken small-pox ..	5
Inoculated, and taken cow-pox accidentally..	3
Neither vaccinated nor inoculated, and have taken small-pox	20

With the exception of two, all the cases of small-pox after vaccination were "mild." In the five cases of small-pox after inoculation, one is described as very severe. As so much has been said of the frequency of small-pox after vaccination, and of the great mortality in such cases, the results obtained from the examina-

tion of 356 replies sent to the Epidemiological Society, are of great value.

182 state expressly that they have never seen a death from small-pox after vaccination.
3 state respectively that the cases have been "few," "very few," and "frequent."
44 state their experience in numbers, and give an aggregate of 70 deaths.
127 give no statement of their experience on the subject.

The following table gives the experience of thirty practitioners on the respective mortality of (1) Natural small-pox; (2) Small-pox after small-pox; (3) Small-pox after vaccination.

	Cases.	Deaths.	Per-centage of Deaths.
Natural small-pox	1731 ..	361 ..	20·85
Small-pox after small-pox ..	58 ..	22 ..	37·92
Small-pox after vaccination ..	929 ..	32(a)	3·44

In the replies with which the Epidemiological Society has been favoured, great stress is laid on the manner in which the operation of vaccination is performed; on the importance of fresh and efficient lymph; and on the careful watching of each case. He had received from Mr. Marson, the resident medical officer to the Small-pox Hospital, a statement proclaiming, in unmistakable language, the importance of good vaccination. Mr. Marson states, that during the last sixteen years he had vaccinated about 40,000 persons; and that of this large number not one had subsequently come to the hospital with small-pox. He had, through the courtesy of the Poor-law Board, had an opportunity of examining, with Dr. Lewis, some hundred returns from all parts of England and Wales, and a few of the facts were set forth in the following tables:—

Evidence of great Neglect of Vaccination, as shown by the Number of Vaccinations under One Year of Age, and the Number of Births, for 1851.

	Vaccinations.	Births.	Per-centage of Vaccinations.
In 13 unions in London ..	4641 ..	21,598 ..	21·
In 31 unions in the country ..	706 ..	7674 ..	9·2
Teesdale	70 ..	593 ..	11·8
East Stonehouse	1 ..	438	
Bideford	22 ..	567 ..	3·8
Welwyn	4 ..	84 ..	4·7
Hitchin	85 ..	905 ..	9·4
Northleach	4 ..	339 ..	1·1
Longhborough	61 ..	968 ..	6·3
Camelford	1 ..	388	
Redruth	378 ..	1925 ..	19·
Kettering	12 ..	644 ..	1·8
Cardigan	34 ..	531 ..	6·4
Samford	2 ..	447	
Ipswich (1850)	56 ..	1153 ..	4·9
Thingor (1850)	10 ..	586 ..	1·7
Arundel	0 ..	73	

Evidence of Previous Great Neglect of Vaccination from the Excessive Numbers of Vaccinations in One Year, as contrasted with the Births of that Year. (*From Years* 1850-51.)

	Total Vaccinations in the year.	Births in the year.
St. Albans Union, 1850 ..	151 ..	562
„ „ 1851 ..	1750 ..	581
Bromyard „ 1850 ..	679 ..	342
Windsor „ 1850 ..	1507 ..	480
Ross „ 1850 ..	613 ..	448
Watford „ 1850 ..	915 ..	588
Hatfield „ 1850 ..	423 ..	227
Maldon „ 1850 ..	809 ..	678
Tregaron „ 1850 ..	557 ..	301
„ „ 1851 ..	405 ..	308
St. Asaph „ 1850 ..	727 ..	493

It is stated in a Report of the Poor-law Board, that, in 1848, the number of persons vaccinated under one year of age by the public vaccinators in the whole of England amounted to 33 per cent. of the total births; and yet it is seen, that in various unions not more than 2, 3, or 4 per cent. are so vaccinated. Again, it is stated by Dr. Gregory, in his valuable lectures on Erruptive Fevers, that, up to the age of eight years, "the protective power of cow-pox may, for all practical purposes, be considered as complete." It may therefore be assumed, that all those who perish under five years of age had not been vaccinated. In a very valuable report of Mr. Wilde, of Dublin, contained in the report on the censns of Ireland for 1841, it is stated, that of the 56,006 deaths from small-pox which occurred in that country in the decennial period 1831-41, no fewer than 79 per cent., or 45,824, were those of children under five years of age. In this country the ratio is pretty nearly the same; thus, Dr. Gregory states, in his Lectures, that of 9762 persons who died of small-pox in England, in 1837-38, the deaths under five years were 7340, or 75 per cent. of the whole. In facts like these, exhibiting not the failure, but the neglect of vaccination, is the true cause of that mortality of which we have heard to-night, to be discovered. It might be supposed, from the way in which inoculation had been lauded, that it was, under proper management, a safe and harmless measure; but the experience of it in the last century gave very different results; for, in the thirty years following the general use of inoculation, from 1770—1800, the deaths in London from this disease amounted to 92 in 1000 from all causes. In one thing he cordially agreed with Dr. Gregory, and that was in the absolute necessity for a searching inquiry into the whole system of vaccination as at present conducted. It was a thing all but incredible, that in ten years 45,000 children were, in Ireland, allowed to be sacrificed at the shrine of ignorance, prejudice, and apathy. Mr. Grainger concluded his able address amid considerable cheering.

It being now just upon ten o'clock, some discussion took place respecting the adjournment of the discussion until the next meeting. Eventually, the proposition was carried to continue the discussion for a period not exceeding an hour.

Dr. Copland said, he adhered to the opinion which he had expressed on the point in 1823. Yet he believed, that if all children between the third and sixth months were inoculated with the proper precautions, small-pox, as a secondary disease, would soon be unheard of. With respect to the 480 medical men who had supplied the Epidemiological Society with information, he would inquire, what proportion this number bore to the great mass of the Profession?

Dr. Webster said, by the published weekly returns of deaths, thirty patients died in the Small-pox Hospital during the last two months, of whom five were reported protected. Now, what was the evidence of such conclusions? The first instance was twenty-four years old, and had been vaccinated when young—"one very small cicatrix, scarcely perceptible." The second was twenty-five years old, and had been vaccinated at Strasbourg in infancy—"one very imperfect cicatrix." The third had attained her eighteenth year, and was vaccinated when young—"one cicatrix, scarcely perceptible." The fourth was forty-eight, and had been vaccinated when young—"two cicatrices, one good, the other very small;" while the remaining death, or fifth, occurred in a patient who was thirty years old, and had undergone vaccination, like all the others, when young—"one cicatrix, but very indistinct." Taking every circumstance into consideration, grave doubts must prevail regarding the genuineness of the vaccine disease originally produced. Cases were on record of persons having small-pox twice. The well-known case of Mr. Langford, in the fourth volume of the Medical Society's "Transactions," might be quoted among others; and only last January, Mr. Mears, of Lambeth, reported to the Registrar-General an instance of a child who died of small-pox, when three years old, although marked by an attack of that disease, which only occurred one year before.

Dr. Balfour said, that in the ten years, 1837-46, and out of an aggregate force of 255,000 soldiers serving in the United Kingdom, (and who are all presumed to be protected by vaccination or by small-pox previous to enlistment,) 538 cases of small-pox were admitted into hospital, being in the ratio of 2 per 1000 of the strength annually; that of those, 52 died, or about ten per cent. of the cases. The latter proportion was higher than that stated by Mr. Grainger as the result of the returns made by private practitioners, but is exactly the same as in the navy. The returns for a period of twelve years showed the proportion of deaths to cases, in the fleet serving in the Mediterranean, to be ten per cent. The experience of the Royal Military Asylum appeared to him to bear strong evidence in favour of vaccination as a protective measure, for there had not been a single death from small-pox in that establishment during the last twenty-five years, among a constant average of 350 boys.(a)

Dr. Gregory remarked that it would be gratifying to him to meet the gentleman who had spoken so long in the rooms of the Epidemiological Society, and to discuss some of the minutiæ into which he had entered. But he begged to say, that this was the Royal Medical and Chirurgical Society, and not the Epidemiological

(a) In seven of these, the evidence of vaccination was not satisfactory; and in six others, the death is ascribed to superadded diseases.

(a) The real average is 480.

Society. (Hear, hear.) He had not been the least aware that an attempt would have been made to answer his paper by the reading of another emanating from the Epidemiological Society, and every word of which had been written before it was known what he (Dr. Gregory) had to say. Now, he would inquire whether this was a fair plan of proceeding towards the author of a paper read to this Society? After recapitulating some of the statements in his paper to correct misrepresentations, Dr. Gregory asked, Why was re-vaccination considered so essential in Germany, if, as Mr. Grainger had asserted, the protective power of vaccination was so clearly demonstrable? If this could be explained satisfactorily, he (Dr. Gregory) would acknowledge his error. This question was not to be settled by the opinions of 400 medical men, but by the experience of the whole world. (Hear, hear.)

Mr. Grainger explained, that he had met Dr. Gregory five or six weeks since, and stated to him that he should make some remarks on his views, which had been already before the public.

MEDICAL NEWS.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 18, 1852:—

Holmes, Arthur Newstead, Pocklington, Yorks.
Langworthy, Southmead, Modbury, Devon.
Robinson, Francis, Ware, Herts.

Naval Appointments.—Acting Assistant-Surgeons, James Wallace, to the Victory, flag-ship at Portsmouth; Patrick W. Dillon, to the Impregnable, flag-ship at Devonport. Surgeon William D. Kerr, M.D. (1846), to the Highflyer. Assistant-Surgeons Daniel W. Stephens, M.D. (1848), to the Highflyer; James D. Cronin (1844) to the Arrogant, 36, at Portsmouth. Surgeon James Donovan, M.D., (1835), to the Winchester. Assistant-Surgeon Henry Slade (1847), serving in a naval hospital, to the Winchester. Acting Assistant-Surgeon Daniel Saunders (1852), to the Winchester. F. Lekeux (1851), confirmed to the Castor, 36, at the Cape of Good Hope. Assistant-sugeon Julian W. Bradshaw (1847), to Haslar Hospital, vice Henry Slade, to the Winchester, 50, at Portsmouth.

Military Appointment.—Hospital Staff: Assistant Staff-Surgeon Melville Neale, M.D., to be staff surgeon of the 2nd class.

Obituary.—On January 11, at Calcutta, Surgeon Thomas Murray, of the Bengal Medical Service, aged 35. At Woolwich, on the 16th inst., Mr. Edmond Waters, surgeon, aged 76. On the 3rd inst., in Dale-street, Manchester, James Rhodes, Esq., aged 29, one of the surgeons to the Manchester and Salford Lying-in Hospital. On the 18th inst., at Dalston, in the 68th year of his age, Edward Seaton, Esq., surgeon R.N., formerly of Rochester. On the 8th inst., in the 71st year of his age, John Harry, M.D., formerly private physician to Her Imperial Highness the Grand Dutchess of Oldenburgh, and afterwards to her sister, the present Queen-mother of the Netherlands. On the 11th inst., at his residence, Henry-street, Tipperary, suddenly, William Reardon, M.B., Trinity College, Dublin, M.R.C.S., Eng., aged 47. On the 19th inst., Thomas Gaskell, Esq., M.R.C.S., of Markham-square, Chelsea, aged 61.

Her Majesty's Levee, of Wednesday last, was attended by the following members of the Profession:—Dr. Ashley, Dr. Bushnan, Dr. Tweedie, Dr. Winslow; Mr. White Cooper, and Mr. Edwin Saunders. Dr. Adolphus Collings was presented by Sir William Collings; Mr. George, of the 1st Life Guards, by Col. Hall M.P.; Mr. Tardrew, of the 2nd Life Guards, by Col. Macdonall; Dr Todd, by Lord Claude Hamilton; Mr. Wells, of the Bengal Medical Service, by Lieutenant-Col. Lane, C.B.

Medical Appointments and Vacancies.—At the West Norfolk and Lynn Hospital, a house-surgeon and secretary is wanted, salary 50*l.* a year, with board, lodging, and washing. Testimonials on or before the 10th of April; date of election, the 20th. The same offices are vacant at the Kidderminster Infirmary; salary, 80*l.* a year, with coals, candles, attendance, the use of household linen, and furnished apartments. Nothing said about board, but we presume the house-surgeon and secretary is not expected to board himself out of 80*l.* a year. He is not allowed to practise in Kidderminster, even after resignation of office—a most unusual, unjust, and unjustifiable regulation, and one which, we believe, the judges of the land have decided cannot be sustained at common law. An M.R.C.S. preferred. Testimonials on or before March 27; election on the 2nd of April. Dr. Griffiths, of St. Thomas's Hospital, has been appointed Physician to the Incorporated Society of Ancient Britons. A house-surgeon is wanted at the Taunton and Somerset Hospital. He must be M.R.C.S. and L.S.A. Salary, 75*l.* a year, with furnished apartments and board. To engage for three years certain, with three months' notice. The hospital contains 76 beds. Date of election and of office the 3rd of June next.

Naval Assistant-Surgeons.—On Monday night, Captain Boldero again brought the question as to cabins for assistant surgeons in the navy under the notice of the House of Commons, and referred to the testimony borne by Commodore Bruce as to their services at Lagos. Mr. Stafford acknowledged that the question respecting them was in an unsatisfactory state. The present Board, he said, (of the Admiralty,) were not unmindful of the vote of the House, and felt that it ought to be carried out; but, at the same time, *discretion must be allowed to the captains on board*, and no abstract rule could be laid down as rigidly binding under all circumstances. The *animus* of the present Board was to treat the naval assistant-surgeons as gentlemen—(hear, hear)—and to give them every possible opportunity for study and research; and when those in command did not act in the spirit of the injunction of the House, it would be the duty of the Board of Admiralty to do all they could to remedy the inconvenience. (Hear, hear.) The italics respecting the captains are our own; as long as captains are allowed discretion in the arrangement respecting cabins for the assistant-surgeons, so long will there be some, and not a few, too, to whom that accommodation will be refused. The order should be imperative, not conditional; and then it will be obeyed, and with a facility that will show how futile were all the objections raised against it by the practical naval authorities.

A Vote was taken in the House of Commons on Monday night for 23,000*l.* for medicines and medical stores for the navy.

Dr. Letheby has accepted the appointment of gas-chemist to the City of London, to test the quality of gas furnished by the Central Gas Consumers' Company. The Chartered Gas Company have declined submitting their gas to testing, for fear of mismanagement and trickery beyond the control of the responsible officers appointed to the duty.

Dr. Granville.—His Majesty, the King of Sardinia, has conferred the cross of chevalier of the military order of St. Maurice and St. Lazarus on Dr. Granville, in consideration of his long and gratuitous services as physician to the Sardinian Legation in London.

Appointment.—Dr. Samuel Griffith, of St. Thomas's Hospital, has just been appointed Physician to the Incorporated Society of Ancient Britons.

The Hospital for Incurables appears to be making its way. A Committee is in the course of formation, and we hear that this new Institution is receiving very extensive support. Among the donations recently received we observe one of 100*l.*, and several of 50*l.*

Important Decision as to Legal Proof of Delivery of Medicine.—In the Lambeth County Court, on Tuesday, an action was brought by Mr. Benjamin Evans, of Trinity-street, Borough, against Mr. Lovett, hop merchant, of 7, Victoria-terrace, Old Kent-road, to recover 8*l.* for attendance and medicine. The defence set up, and the opinion of the judge (Mr. Francis), are of some importance to the Profession who are compelled to sue their patients in courts of law. Mr. Evans deposed, in conjunction with his partner, having attended the defendant's wife and children, and produced his ledger in proof of the medicines supplied. Mr. Crawy, defendant's solicitor, said, his client did not dispute that the plaintiff had attended Mrs. Lovett and child, and that some medicine had been supplied. The dispute was, that the charges were immoderate, and that it was impossible the medicines charged for could have been supplied in the short space of one month. The bill had been submitted to several medical men, who say that the medicine could not have been needed, and that the bill was exorbitant. His client had paid 1*l.* 1s. at the first visit; and he (the solicitor) now called upon the plaintiff to prove each specific charge. Mr. Evans said he always apprehended a medical man's books were sufficient evidence of attendances and medicine supplied. Had he been aware such a defence would have been set up, he would have come prepared. It was impossible for him to swear to each specific charge. Sometimes he, and sometimes his partner, attended, and the medicine sent out was delivered by his servant. The Judge. These charges for lotion and medicines must be proved by you. Mr. Evans: My servant, I am certain, delivered them. Would your Honour adjourn the case for his attendance? Defendant objected to any adjournment, unless Mr. Evans paid the costs of the day; and said, although he was not at home when the medicine came, he was positive nothing like the quantity was sent in. The Judge: You can sever the attendances from the medicines if you

like. Mr. Evans: I can swear to the correctness of the ledger, and it is merely a legal and vexatious defence; and I am surprised at defendant coming here, when the fact is, my charges are for attending his wife, who had contracted a loathsome disease, inherited by her unfortunate offspring. With respect to the overcharge, I defy any respectable man in the Medical Profession to say it is so. I never did, and never will, charge less than 2s. 6d. per visit. The Judge: Well, I don't think myself that is out of the way; but I am not disposed to adjourn the case. Your servant should have been here. You have proved your attendances and a portion of the medicine, and defendant offers 5*l*. How can you pay it? Defendant offered instalments, which plaintiff objected to. The Judge ordered it to be paid in two monthly instalments. This decision shows the necessity of medical men being prepared with their servants as well as their day-books in courts of law, although how "young quack," as the London *gamins* term doctors' boys, could swear to every bottle, powders, pills, etc., he left, is a query yet to be tried.

Lunacy.—A return to the House of Lords just issued states, that the number of petitions and matters in lunacy set down for hearing before the Lord Chancellor on the 2nd November, 1850, was 34. The number of petitions and matters in lunacy heard, or otherwise disposed of by His Lordship, between the 2nd of November, 1850, and the 2nd of November, 1851, was 418.

State Asylums for Criminal Lunatics.—Lord Shaftesbury introduced a motion into the House of Lords lately for the establishment of a State Asylum for criminal lunatics, and in the course of his speech he pointed ont the great disadvantages resulting from the admixture of criminals with other lunatics. Lord Derby spoke of the difficulties besetting the carrying out such a measure, and it was ultimately agreed to leave the matter in the hands of the Government; so that this important improvement in lunacy matters is shelved for the present.

House of Lords.—The Earl of Shaftesbury has several notices on the books of the House of Lords having reference to medical matters. 1st. The great cost and delay of commissions in lunacy, and of all subsequent proceedings with reference to the estates and incomes of persons found lunatics by inquisition; and also the difficulties and impediments in the way of the full operation of the remedial sections 94, and following sections of the Act of the 8th and 9th Vic., chap. c., as respects cases of small property and temporary lunacy. (No day named.) 2nd. To call the attention of the House to the sanitary condition of the Metropolis. (No day named.)

The Pharmacy Bill.—Petitions in favour of this Bill have recently been presented to the House of Commons by Mr. Hindley, from Staleybridge (3), Mossley, Lancaster (2), and Odiham, Hants; by Mr. Pigott, from Reading; by Mr. Brockman, from the physicians, surgeons, and chemists at Sandgate; by Mr. Scholefield, from the medical practitioners and chemists of Birmingham (2); by Lieutenant-Colonel Boyle, from Frome; by Sir T. Birch, from Liverpool; by Mr. J. H. Vivian, from the physicians and medical practitioners of Swansea, and from the chemists of that town; by Sir W. P. Gallwey, from Thirsk; by Sir J. Johnstone, from the medical practitioners and chemists of Scarborough; by Mr. Ellis, from Teignmouth (3); from Peterborough and Haslingden (3); by Mr. Adair, from the chemists of Cambridge; by Mr. Bell, from the President and censors of the Royal College of Physicians, and from the President, Vice-Presidents, and Council of the Royal College of Surgeons; by Mr. T. Duncombe, from Finsbury; by Lord Dudley Stuart, from Marylebone, Paddington, and Camden-town; by Mr. Wakley, from Finsbury; by Mr. J. Williams, from Norwich (2); and by Mr. W. Williams, from Walworth, being altogether thirty Petitions in favour of the Bill. The following is the list of Members of the House of Commons selected to constitute the Select Committee on the Pharmacy Bill:—Mr. J. Bell, Mr. Ewart, Mr. Bouverie, Sir William Gibson Craig, Mr. Cardwell, Sir Henry Willoughby, Mr. Wakley, Mr. Deedes, Mr. Hindley, Mr. Jackson, Mr. Farrer, Mr. Wyld, and Mr. Bramston.

Lunacy.—In re Dixon.—In this case the Lords Justices of Appeal awarded the sum of 200*l*. out of the estate of the lunatic towards paying the costs incurred by Dr. Fox, under whose care the lunatic was, in defending the commission against a writ of Habeas Corpus issued at the instance of the Alleged Lunatics' Friend Society. The Court considered that, in defending the suit, the conduct of the physician and of the next of kin, for whose additional expenses another sum of 100*l*. was awarded, was intended for the benefit of the lunatic. The proceedings of the Society in this case, therefore, have deprived the estate of the lunatic of the sum of 300*l*.

City of London Hospital for Diseases of the Chest.—The anniversary festival of this hospital was held a few days since; Earl Granville in the chair. The noble President, in proposing the toast of prosperity to the hospital, took occasion to commend it highly, and to show forth the necessity for its establishment. He said, that, in 1851, the number of deaths in the Metropolis was 55,000, and of these between 18,000 and 19,000 were caused by consumption, or diseases of the heart and lungs. The proportion was greater in 1847, during the prevalence of the influenza. Since the opening of the hospital, between 10,000 and 11,000 patients had been relieved, and there were from 150 to 170 applicants daily. The total expense of building the hospital would be about 15,000*l*. or 16,000*l*., of which 5500*l*. had been already paid, and 5000*l*. more must be paid this year. The Hospital Report stated, that during 1851, 2951 out-patients were admitted, and 774 since the beginning of the present year, making a total of 11,194 patients since the opening in June, 1848. The number of patients weekly was 568; at present, owing to the prevalence of chest affections, the daily attendance varied from 150 to 170. The receipts during the past year were 3575*l*. 1s. 9d., which, with 4270*l*. 1s. 2d. in hand at the commencement of 1851, gave a total of 7845*l*. 2s. 11d., of which 4733*l*. 9s. 9d. were expended during the year, leaving a balance of 3111*l*. 13s. 2d. A further sum of 2489*l*. 9s. 9d. has since been paid away; the balance now being 622*l*. 3s. 5d. The subscriptions in the room amounted to 5030*l*., including a sum of 500*l*. from Mr. S. Gurney, 300*l*. from Mr. J. Tucker, 300*l*. from Mr. H. Tucker, 250*l*. from Mr. H. E. Gurney, 250*l*. from Mr. T. Stone, and 63*l*. from Mr. Dixon.

Charity for Hospital Purposes.—The Hereford General Dispensary has had its funds increased by a donation of 100*l*. from Mr. Prendergast. The late Mr. Lombe, of Melton-hall, Wymondham, Norfolk, recently deceased at Florence, left his personal property, subject to the life interest of his widow, to University College Hospital. The will has been proved in the Prerogative Court of Canterbury by the executors, Baron de Goldschmidt, Treasurer to the Hospital, and Mr. Atkinson, Secretary to the College. The property is estimated at upwards of 25,000*l*.

The New Metropolitan Albert Park.—We are glad to learn that Lord John Manners, the present chief of the Woods and Forests, is anxious to carry out the intentions of his predecessors, in giving to the large population occupying the north-eastern portion of this vast Metropolis, the advantages to be derived from possessing a place of retreat and recreation, where, issuing from their close and pent-up abodes, they may enjoy the fresh air and sweet face of nature. We have taken great interest in the accomplishment of this measure, feeling assured no less of its sanitary than political importance. It is the duty of all Governments to look well after a healthful state, both of the body and mind of the people. We trust, therefore, that the Chancellor of the Exchequer will also do his best in the business,—nothing is to be done without "the ways and means;" and, as the Bill was ready for the House of Commons previous to the breaking-up of the last Administration, we can see no reason why it should not be passed this session, and the work actively pushed forward. It is perfectly astounding to see the immense bodies of brick and mortar which are rising up in this and every other direction around the Metropolis; we must have space left for the lungs.

The Cholera.—In a memorial respecting the new regulations for slaughter-houses in the City, addressed to the City Court of Sewers, it is stated, that in the two memorable and terrible visitations of the cholera, in 1832 and 1849, not a single person died of the whole of the inhabitants of Whitechapel-market, however great the mortality in all other parts of the City. According to De Foe, certainly not one of the best authorities, a very different state of things obtained during the prevalence of the great plague. The mortality in Whitechapel-market was then most frightful. All slaughter-houses should be *extra urbem*.

Progress of Epidemics.—Accounts from the Cape de Verd islands to Jan. 31st, state that there has been a great deal of sickness there, especially at San Antonio and San Vincente. At the latter place nearly three-fourths of the population had died; at the former large numbers had perished, and the mortality was increasing at the latest dates. The islands had suffered greatly from gales and rains, which had beaten down houses, and destroyed crops. The inhabitants were obliged to live in mud hovels, and to this cause was ascribed the great mortality. The sufferings of the poor in consequence of the dearth of grain and potatoes in Posen, Westphalia, Greis, the Tyrol, Cassel, Niederlausitz, etc., are extreme, and the famine thus existing, will, it is greatly to be feared, pursue its usual course, and eventuate in a destructive adynamic pestilence. Bands of robbers, rendered such by starv-

ation, traverse Posen, and necessitate patrols of cavalry for the protection of travellers. In Westphalia, beans boiled with roots, have superseded bread and potatoes with the poor; while in Wermeland and Oestland, Sweden, recourse has been had already to straw and the bark of trees for food. Murders and suicides are committed much more frequently than heretofore. The cholera is still lingering in some districts of Jamaica, and the small-pox is committing sad ravages in others. In Kingston vaccination (qy., *re*-vaccination) was being generally resorted to, in order to battle with the disease, should it break out in that city. The *Falmouth Post* (Jamaica) says:—"We regret to learn that five deaths occurred in this town last week from small-pox, and that the disease continues to progress to a fearful extent in every part of the parish. In the Stewart-town district the total number of cases up to the 19th inst. amounted to 787, and the deaths to 64. On Green Park estate, and in that neighbourhood, there are hundreds of sufferers; and, in the several towns, the people who are afflicted with the prevailing epidemic, are represented to us as being in a very destitute condition. In many districts people are dying from the want of medical attendance, medicine, and nourishment." Barbados is reported to be quite healthy.

Quadruple Birth.—A young woman was lately delivered in Cork of four living children, two boys and two girls, who, with the mother, are reported "to be as well as can be expected." Quadruple births are somewhat rare, but it is still more rare to find that all the four children survive.

Sale of Arsenic Act.—Mr. Baron Parke, in charging the grand jury at Lewes on the Home Circuit, referring to a case where a woman was indicted for poisoning her husband with arsenic, said, "He was much surprised to find that it appeared by the depositions that the poison had been purchased of a chemist (*query*, druggist or grocer) in one of the villages in this county, and that the person who vended it had disregarded all the provisions of a recent and most wholesome enactment, introduced by Lord Carlisle, and was, *in fact, entirely ignorant of the existence of such an Act of Parliament.* He, therefore, thought it right on the present occasion to explain, that the Legislature, with a view to prevent diabolical offences of this description, had thought fit to enact that no arsenic should be sold in less quantities than ten pounds, without being first mixed with soot or indigo, which would have the effect of rendering it impossible to administer it in broth or tea without the person to whom it was given at once seeing by the colour that there was something wrong, and, in addition to this precaution, no person was allowed to sell arsenic to any one without entering his name and address in a book to be kept for that purpose, and, in the case of a stranger, he was required to have the attendance of some person to identify him, so that the party might be found afterwards in the event of his attendance being required for any purpose." The learned judge said, "that if any of these precautions had been attended to in the present case, in all probability the life of the deceased man would have been saved; and, as a penalty to the extent of 20*l.* was incurred by any party who sold arsenic without complying with the requisitions of the Act of Parliament, he could not help remarking, that the police would do well to turn their attention to the subject, and lay informations before the magistrates against all persons who might offend in future." The italics in this quotation are our own; we marked the passage in that manner to draw attention to it. It appears from that statement, that a druggist in one of the home counties is or was absolutely ignorant of the passing of the Sale of Arsenic Act, and of its requirements and penalties. What, then, may we expect to be the state of ignorance of those who retail poisons in counties still more distant from London, apparently almost the sole seat of knowledge? Instead of setting the police to prosecute these ignorant persons, it would be better to furnish them with information. For a few shillings,—and they would be shillings well spent,—the principal enactments of the Act might be set up as a broad-sheet, and, by the medium of the police, distributed to the trade throughout the length and breadth of the land; or, if the lives of the men, women, and children inhabiting this land, and the prevention of crime, be not a sufficient inducement to the authorities to encounter this outlay, the Pharmaceutical Society, the would-be ruling power of the druggists, should incur the expense, and transmit the papers to the wholesale houses, with a request that one or more be enclosed in the packages in which are contained the country supply of drugs. This would be far better than mulcting the poor village druggist and grocer of 5*l.*, 10*l.*, or 20*l.*, for the infraction of an Act of which he had not heard previously. We may add, that the soot mixture is all bosh; for, if the poison be dissolved in tea or broth, and the mixture, after having been carefully filtered, has been well sweetened, the colour will be no impediment to murder, and probably not even the taste. There are other mixtures,—chemical, and not merely mechanical, which would be far more useful. Ere we close this paragraph, we may remark, that all the credit of the Act is given by Baron Parke to Earl Carlisle; the efforts of the Medical Press for very many years, urging on the Legislature the necessity for passing some Act to restrain the indiscriminate sale of poisons being altogether ignored. But so it is, and so it always will be,—one man works hard, and another gets the credit of it. At Kingston, Mr. Justice Coleridge, following the example of Baron Parke, took up the subject of secret poisoning in his charge to the grand jury, at present apparently an endemic mania in the country, and said, that he regretted to observe that this dreadful offence was but too common; it was an offence very easily committed upon one another by persons nearly and dearly related; and it was a lamentable fact, that, in the majority of cases, it was resorted to by women, either to get rid of their husbands or of other relatives. He thought it right, therefore, that in their capacity of magistrates they should spare no pains or expense to detect the guilty parties in cases where suspicion existed. In former days it was carried on as a trade, and there was no doubt that many persons had fallen its victims without their deaths causing any inquiry, and, from the defective state of science, detection probably could not have taken place. Now, however, especially with reference to arsenic—the poison most commonly used—the discovery of its existence in the human body was reduced to a perfect certainty. The judge then directed their attention to the recent enactment on that subject, and after remarking that, from what had come under his own observation, the provisions of this most important statute were either unknown in many of the country districts, or else were disregarded. He proceeded to corroborate the view taken above by saying, that he thought the magistrates in the different divisions of the country would do well to publish the provisions of the statute in question, either in a handbill or in some other manner, and also that the police should be instructed to take proceedings against all persons who infringed the law; for, if only a small fine were inflicted in the first instance, it would have the effect of deterring others.

Dead Houses in Prussia.—In the Bill which was passed for the abolition of intramural interments, provision was made for the establishment of dead-houses, or houses for the reception of corpses, the retention of which in dwelling-houses might be accompanied by danger or be disagreeable to the survivors. In Prussia, where this system has long been established, it is reported, that out of a population of 430,000 in Berlin, only 28 corpses were brought last year to three out of the six existing dead-houses, and the other three were totally unused. Arrangements are made there also for watching corpses, where there is any ground for supposing trance or catalepsy to have produced the appearance of death; but as yet no single instance, it is said, has occurred of a corpse so watched having given signs of resuscitation. The plan is, nevertheless, a good one, and is reported to have been of effectual service in other parts of Germany. It is of essential importance in those countries where the dead are speedily returned to mother earth.

DEATHS *in the Metropolis for the week ending Saturday, March* 20, 1852.

Causes of Death.	March 20. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	523	399	286	1208	10513
Specified Causes	522	399	235	1206	10465
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	154	32	12	198	1939
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	3	26	15	44	484
3. Tubercular Diseases	81	134	9	224	1918
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	67	36	42	145	1269
5. Diseases of the Heart and Blood-vessels	2	30	19	51	350
6. Diseases of the Lungs and of the other Organs of Respiration ...	104	81	81	269	1990
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	30	26	18	74	613
8. Diseases of the Kidneys, &c. ...	2	10	10	22	105
9. Childbirth, Diseases of the Uterus	...	5	...	5	112
10. Rheumatism, Diseases of the Bones, Joints, &c.	...	8	6	14	74
11. Diseases of the Skin, Cellular Tissue, &c.	1	...	...	1	14
12. Malformations	3	1	...	4	22
13. Premature Birth and Debility ...	29	1	...	30	242
14. Atrophy	28	...	3	31	168
15. Age	...	...	62	62	653
16. Sudden	1	...	...	1	179
17. Violence, Privation, Cold, and Intemperance	17	9	5	31	333
Causes not Specified	1	...	1	2	48

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have no desire to take up the gauntlet in the case of the L.A.C. *v.* M.R.C.S., feeling my incompetency to the task, and being willing (if it be necessary) that some more able hand should do it; but I cannot allow the remarks that have lately appeared week after week, in your columns to Correspondents, to pass unnoticed; and in the first place, as some two or three of the L.A.C.s seem so jealous of their privileges, I would ask, has an L.A.C. any more right to attend a purely surgical case than an M.R.C.S. a medical one? Yet such things are constantly taking place. Again, why does an L.A.C. place "Surgeon" on his door-plate, if he has not the College diploma? Your Correspondent of March 6th, tells us "the College diploma is no test of a man's fitness for general practice"! This, as a general rule, I deny; as few men think of attending lectures for the College only. I for one can declare I paid quite as much attention to the lectures and medical practice for the Hall as for the College,—was regular at the weekly examinations of the class, and have my schedule for the Hall fairly and honestly filled up. With all due deference to "Justitia" and "Fiat Justitia," if they wish to prosecute, let them first attack the men who have no qualification whatever; and who, in defiance of every principle of honour and honesty, openly violate the law: this will give them something to do; then look to their licentiates, and see they do not encourage quackery! We have an instance "down East" of an L.A.C. who has a kind of co-partnership with a chemist and druggist in vaccination: they "going halves" in all cases sent or vaccinated by the latter; and in cases of serious emergency the same thing takes place: so, in return, this chemist and druggist, (who, I should inform you, has a fine flaming lamp, with surgeon and accoucheur upon it,) whenever he has a case likely to prove fatal, calls in L.A.C., on purpose to get a certificate of death from him.

Apologizing for taking up so much of your time,

I am, &c.

Your Well-Wisher and Constant Subscriber.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have just been perusing your Number for last Saturday, 20th inst., and find among your "Mortality Notabilia," a notice of the death of a premature child (between five and six months), after having lived twenty-three hours, its weight having been only 1 lb. 8½oz. The case is recorded as having been "singular," &c.

Now, it so happened, that in September, 1843, I attended the lady of a resident of this place when her child (first), a female, was born, after about the twenty-fourth week of uterine life, its weight being only 18½oz., its length 11 inches. It lived and performed all the natural functions for thirty hours, and then died, I fear from over care, not being allowed the opportunity of breathing pure air by being too deeply buried under the bed-clothes with its mother. The lady has had several children since, all mature and healthy.

If the above note is worth inserting, your doing so will oblige

M. Jennette, Surgeon, Birkenhead Hospital, &c.

Dr. Davey, of Colney-Hatch.—When this mesmeric gentleman can address us with proper courtesy, we may publish his letter. Meanwhile we feel bound to state the gist of that which we have received. Dr. Davey informs us, that in the report of the evidence given by him in the late case of Mrs. Cumming, he was "grossly misrepresented." We took our version of Dr. Davey's evidence from the reports in the daily press; and it would have been well for Dr. Davey if he had, at the time, intimated to the public, as now to us, that he does "*not* think the man who disbelieves in mesmerism and clairvoyance is of unsound mind;" and that he holds the opinion that he does so think is "in no way to be reconciled with what did actually transpire on the occasion." Dr. Davey further tells us that the Middlesex magistrates, knowing the truth of the above, have, as they were bound to do, "expressed themselves as perfectly satisfied" with the evidence that he *did* give. Lastly, Dr. Davey intimates to us, that, "as a matter of duty" to himself and family, he has "resigned" his appointment at Colney Hatch. The "resignation" was of course "accepted with regret," and "declared to be a heavy loss;" and we readily give Dr. Davey the full benefit of the complimentary and gentlemanly expressions usual upon all similar occasions.

[To the Editor of the Medical Times and Gazette.]

Sir,—A few remarks which I sent to your excellent Journal some weeks ago have called forth so many Correspondents that I hope you will not object to allowing me a small corner for a brief reply to some of them. Your Correspondent, "Novice," asks you to what extent an M.R.C.S. Eng. may practise without the Hall qualification. If "Novice" be an M.R.C.S. he ought to know that the English College of Surgeons is a mere corporate body, and that it has no special Act of Parliament to confirm its Charter, or give it any important power or privileges, and consequently the diploma which it gives, although it professes to authorise the party holding it to practice surgery, is almost useless, inasmuch as there is no illegality in bone-setters, druggists, or any one practising as a surgeon, provided they confine themselves to strictly surgical cases; and any body, either with or without a diploma, and practising surgery merely, may call himself a surgeon, and recover, in courts of law, reasonable charges both for medicines and attendance. Your Correspondent, "A Subscriber," among other remarks says, "An M.R.C.S. can now practise as a general practitioner as well without the L.S.A. as with it;" and goes on to state:—"Is it likely men will take the trouble to pass the Hall when they can enter the army, navy, &c., without it, and the Unions no longer insist upon it." Now, with regard to the army, navy, &c., I think it is tolerably well known that those bodies have Medical Examining Boards of their own, and before which every candidate, be he an M.D. or anything else, must submit to an examination as to his fitness to undertake the duties of his office; and, with regard to the Unions, I am not aware of any who employ medical officers who have not a double qualification, unless they have been engaged before the Poor-law Commissioners issued their general regulations, or unless it be in some rather remote district, where a properly qualified person could not be easily obtained. "A Subscriber" also states that an L.S.A. has received a title he is ashamed of owning, for who puts apothecary on his brass-plate? and he goes on to say that in these words is contained the very reason why the majority of men now commencing practice have not the licence. I beg to differ from "A Subscriber," and have yet to learn that the great body of licentiates are ashamed or care about putting "Apothecary" upon their brass plates. Why should they, when it is remembered that the curriculum for the Hall, as well as the examination, is now, and has for some time been, more general and extensive than for the membership of the College of Surgeons, and especially so, since the latter body so unjustly endeavoured to degrade the great body of the members by the institution of a grade of Fellows? I suppose the designation or term apothecary is not used because it is not usual to do so; and, also, that the great majority of practitioners of ten and twenty years' standing hold the double qualification, and prefer using the common name of surgeon.

The Apothecaries' Society hold an Act of Parliament which does not permit any one to practise as an Apothecary without first obtaining the Certificate, and if the Society are remiss in enforcing the powers confided by Parliament to them, and I believe they are, by allowing of late so many M.R.C.S.s and others to practise as apothecaries without a certificate, it is for the public interest that they either be compelled to prosecute the offending parties, or resign their functions. I am willing to admit that the Society generally deserve well of the public and the Profession, for having improved most materially the education of the candidate for legal general practice; and, doubtless, if proper cases were selected and laid before them, they would not be backward in letting the offenders feel the power of the law of the land,—a power which they most certainly would be supported by the public feeling in enforcing. I am, &c. Justitia.

P.S. Many parties who are illegally practising as apothecaries expect to evade the law by merely charging for attendance,—omitting in their bills all mention of medicines; but that trick, I believe, would not avail them, as the Judges of the land have long since decided that, practising as an apothecary is not merely retailing medicines, but visiting, and prescribing as well, in medical cases.—J.

[To the Editor of the Medical Times and Gazette.]

Sir,—The Council of the College of Surgeons have sent the following reply to the memorial of the meeting of the medical men of this town and neighbourhood, praying them to express some opinion on the doctrine and practice of homœopathy:—

"College of Surgeons, 9th March, 1852.

"Sir,—I am desired to acquaint you, that your communication, enclosing copies of resolutions of a meeting of the Medical Profession of Hull and its neighbourhood, held in the Hull General Infirmary, on the 6th January last, on the subject of homœopathy, has been laid before the Council of this College, and that the Council, after mature deliberation, consider it inexpedient to interfere in the matter.

"I have the honour to be, Sir,

"Your very obedient servant,

"Edmund Belfour, Secretary."

The Members of the College will hence perceive that they must not look to their nominal head for sympathy or assistance in the humiliating contest which they are compelled to maintain with this impudent, though successful imposture. I am, &c.

Hull. Henry Cooper, M.D

Mr. Toynbee's papers, received some weeks since, will be continued in our next; as also Dr. Johnson's Gulstonian Lecture. Dr. W. Gairdner's paper on Homœopathic Statistics is in type, and will be published next week.

A Subscriber from Commencement.—However much we may regret that a clergyman refused to have the corpse of a deceased surgeon carried into his church, we do not see how we can with propriety entertain the subject. *Ours* is a strictly medical journal.

Mr. Moore, of Sheffield.—1. It does not seem very probable that the New Pharmacy Bill will ever become law. 2. By receiving the journal *direct* from the publishers, and by paying in advance, our Correspondent will save money and insure regularity.

Common-sense.—We cannot consent to become the vehicle for publishing communications rejected by other journals. Neither is it our habit to receive the communications of non-medical men, and decidedly never when unauthenticated. Our opinion on the point mooted by our Correspondent is already recorded—(see Review in our last Number).

J. L., Commercial-road.—We are not aware of the existence of any such publication. J. L. had better apply for information to some practical dentist.

Mr. Caleb Williams, of York.—The subject shall receive due consideration, and we will endeavour to comply with the request.

M.R.C.S.—We doubt if any one who is not a Licentiate of the Hall can legally dispense the medicine he prescribes.

COMMUNICATIONS have been received from—

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Lecture I.

(Continued from page 285.)

The form of disease to which I shall first request your attention, is one for which the name of acute desquamative nephritis has been proposed,—an acute inflammatory disease, characterised by a desquamation of epithelium from the uriniferous tubes. It occurs more frequently than any other form of acute renal disease; being, for the most part, associated with all the cases of what are commonly called acute inflammatory dropsy, whether as a consequence of scarlatina, or from whatever cause originating.

It would be tedious and impertinent to dwell upon the general symptoms of a disease so familiarly known; my observations, therefore, will have reference chiefly to the condition of the urine and of the kidneys.

In the early stages of the disease the urine is usually scanty, high-coloured, and more or less deeply tinged with blood. It is highly albuminous, becoming almost solid on the application of heat or nitric acid. The specific gravity varies, being quite as frequently above as below the normal standard. The urine deposits a copious dark-brown sediment, which, on a microscopical examination, is found to contain numerous casts of the uriniferous tubes, composed of fibrin, in which are entangled entire cells of renal epithelium and blood-corpuscles; numerous cells of the same kind, also blood-corpuscles and irregular masses of coagulated fibrin, are scattered over the field of the microscope. It sometimes happens that the patient dies at this early period of the disease, the immediate cause of death being an attack of convulsions, followed perhaps by coma; or it may be that one or more of the serous membranes or the lungs have become inflamed, the blood being poisoned with the urine which the kidneys have failed to excrete.

When in such circumstances an opportunity offers for examining the kidneys, they are found to be slightly increased in size, and more considerably in weight; the latter, in consequence of the increased density resulting from the accumulation of morbid products.

The cortical substance presents the mingled appearances of anæmia and vascular engorgement; small hæmorrhagic spots are frequently scattered over the surface. The medullary cones are usually congested, and have the dark hue of venous blood; not unfrequently the mucous membrane of the pelvis presents some appearances of increased vascular engorgement.

On a microscopical examination, most of the convoluted tubes are found to be opaque from containing excessive numbers of epithelial cells, which, by a process of desquamation, have been thrown off into the cavity of the tube. Others of the tubes are filled with blood, and occasionally the Malpighian capsules at the extremities of these tubes may be seen to contain blood which has evidently escaped from the rupture of Malpighian capillaries. The tubes filled with blood constitute the hæmorrhagic spots before mentioned, which were supposed to be enlarged Malpighian bodies until Mr. Bowman demonstrated their true nature.

The Malpighian capillaries in this and in every form of acute renal disease, attended by an effusion of serum from these vessels, are somewhat opaque, so that the blood-corpuscles within them appear colourless, the surface of the vessels is sometimes roughened, and their outline is rendered indistinct apparently by the effusion of coagulable materials in their interspaces. It rarely if ever happens that there is any appearance of an organised effusion in the Malpighian bodies. Neither the arteries nor the intertubular capillaries present any change of structure.

The pathological explanation of the condition of kidney which I have described appears to be this,—that the blood contains some morbid or abnormal material, *e.g.*, the poison of scarlatina, which may have been driven in from the cutaneous surface by exposure to cold. An effort is then made to eliminate this poison by the renal epithelium, which is cast off by a process of desquamation analogous to that which the same poison naturally excites upon the surface of the skin. It is probable, that until the cutaneous desquamation has ceased, the patient may impart the disease to others, for the continuance of this process is an indication that the poison is still passing off in combination with the epidermic scales. In like manner it is probable that some of the poison is conveyed away by each cell which is shed from the uriniferous tubes of the kidney. I have already alluded to the fact, that in the normal state no renal epithelium is visible in the urine, and that the appearance of epithelial cells is an evidence and a consequence of disease. In many instances it is impossible to ascertain the nature of the abnormal product which excites this renal desquamation, but in one case, at least, it is not difficult to determine this point. When from any cause the functions of the liver are imperfectly discharged, so that the bile is permitted to accumulate in the blood, the kidneys make an effort to eliminate some of the biliary constituents, and, on a microscopical examination, the urine is found to contain cells of renal epithelium deeply tinged with the new materials. It appears, therefore, that in the effort to eliminate bile, some of renal epithelium become detached, and so is washed away with the secretion.

From a consideration of these facts, viz., that in the natural and healthy condition no renal epithelium appears in the urine; that during the progress of scarlatina the desquamation which seems to be the natural means of eliminating the poison from the skin may be transferred to the kidney; that a similar process of desquamation results from the effort to eliminate bile by the kidneys; and, further, that this renal desquamation never occurs except under circumstances, such as I have already referred to, which are calculated to produce a morbid condition of the blood;—from a consideration of all these facts, it appears reasonable to conclude that the appearance of renal epithelium in the urine affords presumptive evidence, first, that the composition of the blood is abnormal; and, secondly, that some of its abnormal constituents are being eliminated by the secreting cells of the kidney. The process of renal desquamation, which is primarily and essentially wholesome and beneficial, may yet be productive of some secondary, and, as we may say, accidental ill consequences; for the secreting surfaces in the kidney being arranged in the form of minute tubes of great length and very tortuous, it is obvious that the desquamated epithelial cells cannot freely escape, like the epidermic scales, from the cutaneous surface, but that they must frequently fill, distend, and obstruct the tubes, and thus greatly impede, and sometimes entirely arrest, the secretory process. And thus it happens, that many tubes, being rendered inefficient either for the further elimination of the morbid products or for the discharge of their normal excretory functions, the urine is greatly diminished in quantity, and the patient may die from some of the secondary consequences of an accumulation of poisonous excrement in the blood.

With reference to the origin of renal disease in an assumed morbid condition of the blood, it is important to observe the fact, that in all cases of the disease, whether acute or chronic, which have other than obviously local causes, both kidneys are usually found in essentially the same morbid condition, although the disease in one kidney is occasionally more advanced than in the other. Dr. William Budd and Mr. Paget have contributed to the "Medico-Chirurgical Transactions,"(a) some interesting and valuable observations on the symmetry of diseases as an evidence of their origin in altered conditions of the blood.

At present I shall offer no explanation of the appearance of blood and albumen in the urine beyond the simple statement, that the escape of serum and blood from the Malpighian capillaries is a natural and necessary consequence of that impediment to the circulation which is associated with defective secretion. In my next lecture I shall explain, as well as I am able, the connexion between defective secre-

(a) Vol. XXV. See also Mr. Paget's Lectures on Nutrition, *Medical Gazette*.

tion, impeded circulation, and the escape of blood or of serum from the Malpighian capillaries.

I will now offer a few remarks on the favourable progress and termination of the acute disease whose fatal results we have just now been considering.

The greater number of patients suffering from this disease who come early under treatment so completely recover that no trace of the malady remains. One of the earliest indications of improvement, is an increase in the quantity of the urine, so that a patient who, perhaps, for some days has secreted only a few ounces of urine in the twenty-four hours will begin to pass it much more abundantly, of a lighter colour, of less specific gravity, and less albuminous. It is by no means unusual for an adult during the convalescence from an attack of acute nephritis to pass from four to six pints of urine in twenty-four hours, and this increased flow will continue for several days, the urine being at the same time of an unusually pale colour, and its specific gravity as low as from 1010 to 1012. It is probable that the flux results from the natural diuretic influence of the renal excrement, which during the acute stage of the disease has been retained in the blood, and now, when the tubes are beginning to be cleared of their accumulated contents, and the freedom of the circulation is restored, the suppressed excrements are freely eliminated by the abundant diuresis which they excite. It is well to remember, that no artificial diuretic is so efficient as the solid constituents of the urine. Dr. Todd injected urea into the veins of a dog, and the result was, that the animal deluged the floor by the frequency and abundance of his micturition. The same experiment has been performed by others, and with a similar result. The scanty secretion of urine during the early stages of acute nephritis is the result of engorgement of the tubes with desquamated epithelium. What, now, would be the result of giving to a patient at this period of the disease some stimulating diuretic?—some medicine which would be quickly eliminated by a healthy kidney, together with a certain quantity of water sufficient to dissolve and so to carry off the drug? It is obvious that we shall have added to the quantity of excrement in the blood, without in any degree increasing the secretory powers of the kidney, which are for the time suspended, not in consequence of any imaginary inactivity or torpor, removable by a stimulus, but as a result of a literal choking of the secreting tubes of the gland. If we persevere in the use of our diuretics until the renal disease has subsided, the time will come when, during the natural progress of the cure, the abundant flow of urine commences, and by this means the retained excrement and the superadded drugs will be eliminated. The danger now is, that we may erroneously attribute the cure to the diuretic influence of our drugs, the fact being, that these drugs were mischievous during the early stages of the disease, when the urine was scanty, and superfluous in the later stages, when the secretion was abundant.

This is one of many instances which might be adduced to illustrate the impossibility of rightly estimating the influence of remedies without a thorough knowledge of what has been called the natural history of disease.

Returning now from this digression to the condition of the urine during the convalescence from acute nephritis, it is observable that after an interval, which varies from a few days to a month, or even more, the quantity of the urine, which has in the meantime been excessive, is gradually reduced to the normal amount; the sediment which at first was abundant, and of a dark, reddish-brown colour, diminishes in quantity, assumes a lighter hue, and at length ceases entirely, the natural colour of the urine returns, and the albumen, which had been gradually diminishing, altogether disappears.

So long as the quantity of urine exceeds the normal measure, the gradually decreasing sediment is found to be composed of the *débris* of epithelium and blood, partly scattered and partly in the form of cylinders, which, having remained in the tubes until they have become disintegrated, are thence washed away in the current of liquid. There can be little doubt that the increased flow of liquid assists to clear out the tubes, and I have sometimes thought that possibly the epithelial *débris* in the tubes may exert a kind of reflex influence upon the Malpighian bodies, and thus excite them to pour out a stream of water for the actual purpose of flushing the tube, as a grain of dust on the conjunctiva excites a rush of tears from the lachrymal gland.

With reference to the process of desquamation, I have to guard against a possible misconception. It must not be supposed that the epithelial cells are dragged from the basement membrane merely by becoming mechanically entangled in the fibrinous effusion, nor that, when the cells are cast off, the basement membrane beneath is necessarily left uncovered by epithelium. One cell is pushed off by a new cell, which is formed beneath the old one, and, consequently, when the desquamative process has ceased, the tubes are still covered by an epithelial layer, as the skin by epidermis after cutaneous desquamation. It is only after a long continuance of the desquamative process that the renal tubes are left denuded in a manner which I shall presently describe. In a future lecture I shall have to refer to a form of renal disease which is characterised by the absence of desquamation, and I shall show that during the progress of this disease, although the fibrinous casts may be observed in the urine, yet they do not bring with them the epithelial cells, for the obvious reason, that as the cells are not thrown off by a process of desquamation, the fibrinous casts which pass over their surface have not the power of detaching them from the basement membrane.

I have hitherto spoken of two modes in which acute desquamative nephritis may terminate, namely, in death and in complete recovery. In some cases the result is different from either of these,—the disease may cease to be acute, the more urgent symptoms may have disappeared, and the urine may have become more abundant and less albuminous; but the secretion does not return to its natural condition,—it is still albuminous, and deposits a sediment, which, on a microscopical examination, is found to be characteristic of the chronic form of disease, which I shall presently describe. It sometimes happens, but less frequently, that acute nephritis is succeeded by one of the most intractable forms of renal disease, I mean fatty degeneration of the kidney. I shall hereafter give the history of this disease, and shall indicate the signs by which it may be recognised. Meanwhile it may be well to mention, that I have seldom watched a case of acute nephritis through its various stages in an adult without observing, that, after about the second or third week of the disease, a few of the epithelial cells in the urine contain more or less of oil, but after a short time these usually disappear, together with all other morbid products, and the urine returns to its normal condition.

The next form of disease of which I have to speak is one which is characterised by a long-continued shedding of epithelium, which appears in the urine in a more or less disintegrated state,—a phenomenon which suggested the name of "chronic desquamative nephritis," as sufficiently expressing the nature of the disease. The tubes of the kidney gradually lose their epithelial lining, and subsequently become atrophied, or they may be filled with a new and frequently an unorganised material; or, lastly, they may continue to be nourished, secreting serum into their cavities, and sometimes growing into cysts, which at length become visible by the unaided eye. Meanwhile, the renal blood-vessels undergo changes which are of great pathological interest and importance. The kidney in the advanced stages is commonly, but not invariably, much wasted, its substance firm, and its surface irregular. The urine is generally albuminous; its quantity and specific gravity are variable, but the former usually greater, and the latter less, than in health. The disease is so frequently associated with chronic gout, that Dr. Todd has proposed to call it the "gouty kidney." It not uncommonly, however, occurs unconnected with gout or the gouty diathesis. It sometimes has its origin in an attack of acute nephritis. A labourer is exposed to cold and wet, working, perhaps, for several hours in his wet clothes; he is seized with rigors; the urine becomes suddenly scanty, high-coloured, albuminous, and bloody; and more or less of general dropsy appears about the body. The attack compels him for a time to discontinue his work, and to seek for medical aid; the more urgent symptoms soon subside, but the urine continues to be albuminous. Believing himself to be well, or, it may be, impelled by the necessities of his family, he returns to his employment; and so a disease, which by judicious care might have been entirely removed, becomes a permanent chronic malady, and ends in fatal disorganisation of the kidneys.

When the disease is chronic from the commencement, it often comes on in the most insidious manner, and makes great progress before its presence is suspected. One of the most remarkable illustrations of this feature of the disease was afforded by the case of a gentleman, 45 years of age, who

went to bed apparently in his usual health, on the 30th of June, 1847, but awoke in the night with a severe rigor, followed by a violent pain in the abdomen. He sent for his medical attendant, who found him suffering from symptoms of acute peritonitis. He could pass no urine, and the catheter drew away only one ounce, which was not examined chemically. From this time no urine was secreted. Dr. Todd was called to him on the 2nd of July. The symptoms remained the same, severe abdominal pain being the most urgent. The bowels were costive, and the urine was suppressed. He died about the middle of the day, in less than forty-eight hours from the commencement of the urgent symptoms. When the abdomen was opened, so strong a urinous smell was perceived, as to excite a momentary suspicion that the bladder had given way, and allowed its contents to escape. This viscus, however, was sound, but quite empty; it did not even contain sufficient urine for testing. The peritonæum was everywhere in a state of active congestion, and one or two small patches of lymph were observed. I am indebted to Dr. Todd for the opportunity of examining the kidneys, which were of the normal size, and their surface smooth. One contained a cyst about the size of a hazel-nut. On a section, the tissue appeared to the naked eye confused and indistinct, and, on a microscopical examination, scarcely any healthy tubes could be found. Many tubes were filled with recently-formed desquamated epithelium, others had their cellular contents disintegrated, and many tubes had entirely lost their epithelial lining. It was evident that this destruction of the secreting tissues must have been the result of long-continued disease; and the marvel is, not that the kidneys ceased to secrete when they did, but that they should have continued to discharge their functions so long. The immediate exciting cause of the suppression appears to have been the stimulus of three or four wine-glasses of brandy-and-water, which the patient took before going to bed. It is probable that many cases of ischuria renalis, which are said to have been unconnected with organic disease of the kidneys, have been similar to the one which I have just now related; for it is likely enough that a careless observer, without making a microscopical examination of the kidneys, would have pronounced them healthy or very little diseased.

The essential character of the chronic desquamative disease is a shedding of the secreting cells, which are continually washed away in the urine, sometimes in an entire form, but generally in a more or less disintegrated condition. The urine, after standing, deposits a rather dense whitish precipitate, which is composed of cylinders of disintegrated epithelium which have been moulded in the tubes,—"granular epithelial casts." Some of the same disintegrated material is also irregularly clustered or scattered over the field of the microscope.

In the early stages of the disease, these microscopical signs are present before the urine has become albuminous. Thus they may occasionally be observed for a short time after a paroxysm of gout, while the urine is still free from albumen. When the gouty paroxysm has entirely subsided, the granular casts disappear, returning, perhaps, with the next fit of gout. After a time they are permanently present, but in variable quantities,—always, however, being more abundant during the temporary disturbance of the circulation which accompanies the gouty paroxysms. The destruction of the secreting cells is usually measured by the quantity of their *débris* which appears in the urine; but, in estimating the rate at which the disease is progressing, it is important to remember the fact which I have just now mentioned, that during the gouty paroxysms, or during the temporary disturbance of the circulation which accompanies any local inflammation, the quantity of epithelial *débris* may be much increased.

It is also of importance, with reference to this point of prognosis, to distinguish between that portion of the urinary sediment which is of renal origin, and any addition which may have been made to it by pavement epithelium from the bladder, this desquamation of the vesical epithelium being at once a consequence and evidence of irritation of the bladder, occasioned by the contact of morbid urine.

I have already said, that the granular casts may be observed before the urine has become albuminous. In the early stages of the disease, the albumen, like the tube-casts, may be temporarily present during the period of a gouty paroxysm, and this may be the case even after the casts have become a permanent sign. At a subsequent period, the albumen, too, becomes persistent, and there is usually a proportion between the quantity of albumen and the number of granular casts, both being simultaneously increased by exposure to cold, or by local inflammations of the joints,—in short, by any influence which throws an additional amount of excretory work upon the kidneys. For the only explanation of this appearance of epithelial *débris* which seems reasonable is one which I have already given of the phenomena of acute desquamation, viz., that the cells are modified by the effort to eliminate morbid matters from the blood, and that they are cast off together with the materials whose union with them has occasioned this modified act of secretion.

And this affords an illustration of one of the general propositions which I just now enunciated,—that "the pathological changes which the renal tissues undergo have an essentially beneficial object and tendency." I shall presently indicate some of the secondary and accidental ill consequences of the chronic desquamative process. Meanwhile, I have to say a few words with reference to the quantity and specific gravity of the urine.

An abundant secretion of urine is one of the most remarkable symptoms of the chronic desquamative disease. It is, of course, important to distinguish between a copious secretion and frequent micturition, the latter, and especially nocturnal micturition, being a frequent attendant upon all the forms of renal disease, even when the actual quantity of urine secreted is scanty. During the progress of the chronic disease which we are now considering, it is not unusual for a patient to pass from fifty to eighty ounces of urine in twenty-four hours. The specific gravity is low, being on an average about 1010 or 1012. The urine has usually a pale and watery appearance; it is generally clear, and, after standing, deposits a dense sediment, which has already been referred to.

The amount of albumen varies considerably at different periods of the disease, being usually most abundant in the middle periods, and least so in the early and latest stages. The comparatively scanty secretion of albumen in the early stages is explained by the slight degree of vascular congestion at that period; and its diminution, again, in the last stage, is a consequence of the diminished vascularity of the kidney.

There yet remain to be mentioned some peculiarities in the microscopical appearances of the urine, which will be more intelligible and interesting if viewed in connexion with the condition of kidneys with which they are associated.

In some instances, the urine continues to deposit rather copiously a dense whitish precipitate, containing the granular casts and scattered particles of disintegrated epithelium before described, until the secretion suddenly becomes scanty, the patient is seized with convulsions, or with some other symptom of suppressed secretion, and in this manner the case terminates. The kidneys are found somewhat diminished in size, from atrophy of the cortical substance; the structure appears to the naked eye confused, and the lobular markings on the capsular surface are more or less obliterated, but without any decided irregularity of the surface.

On a microscopical examination, some of the tubes are found to be filled with entire and recently cast-off epithelial cells; other tubes have their epithelial contents completely disintegrated; and a large number of the tubes contain no perfect epithelium, the basement membrane being either quite denuded, or having a few granular particles of epithelium scattered over its surface. Many of these denuded tubes are less than the normal size, and are evidently in a state of atrophy, a natural consequence, as it seems, of the destruction of their epithelial lining. It is probable that these denuded tubes have supplied the granular casts which were visible in the urine during life. The opaque granular materials having been washed out, the tubes are left empty and transparent, and when packed in the fibrous meshes of the matrix they have a delusive vesicular appearance. The arrangement of these tubes, and their relations to the other tissues—to the blood-vessels and to the matrix—is precisely similar to that of other undoubted tubes; it is only in their transparency that they differ from the tubes which still retain their epithelial contents; and the transition from the opaque to the transparent tubes may be traced in the gradual washing away of the epithelial *débris*.

There is yet another appearance which is sometimes observed in the tubes. The normal glandular epithelium is

replaced by a layer of delicate transparent nucleated cells, which cover the whole surface of the basement membrane. These cells are such as may be supposed to have the power of secreting water, but not the solid constituents of the urine; and it is probable, that the abundant secretion of watery urine is a result of the condition of tubes which I have just now described, the glandular epithelium being removed, and the basement membrane remaining either denuded or covered by a layer of delicate transparent cells.

In this same condition of the tubes, too, we see the origin of the serous cysts which are frequently found in connexion with the chronic desquamative disease. The commencing dilatation of the tubes in which the cyst-growth originates is often visible under the microscope. The cause of this dilatation is doubtless some impediment to the escape of the contents of the tubes. It is quite possible that the destruction of the epithelium, and with it the removal of the ciliary propelling force, may lead to the accumulation of the liquid contents of the tubes; but, since it is not certain that cilia exist in the human kidney, this explanation can scarcely be considered adequate to account for the phenomena. A sufficient explanation, however, may be found in the condition of the tubes near the bases of the medullary cones, where they are often completely obstructed by the epithelial particles which have been washed into them from the upper portions of the tubes nearer the Malpighian bodies; and it is in the highest degree probable, that upon this accidental obstruction of some of the tubes their growth into cysts depends. Some of the solid constituents of the urine, either urea or uric acid, have occasionally been found in the fluid of the cysts; but they usually contain only a serous liquid; water with albumen, and a minute quantity of alkaline salts. The general absence of the urinary salts is sufficiently explained by the fact, that the tubes lose their glandular epithelium before they become dilated, and assume the form of cysts.

Returning now to the appearances in the urine, it is to be observed, that the desquamative process may continue until nearly all the tubes in the kidney have lost their epithelial contents. The urine, then, will be either entirely free from sediment, or will deposit a very scanty one, consisting of the same granular casts as have already been described, with occasionally some of a different kind, having a peculiar whitish, waxy appearance, and a very definite outline. They are either entirely unorganised, or they may contain one or more small bodies, having the appearance of cell nuclei, as if they might be the abortive germs of cells. One peculiarity of these casts is their great diameter, as compared with that of the "granular" and "epithelial casts" before described, and particularly as compared with some casts to which I shall have to refer in a future lecture. While the diameter of the casts last-mentioned does not exceed that of the free canal in the uriniferous tubes,—the cavity, that is, in the middle of a tube, which has an epithelial lining,—the diameter of these, which I propose to call "large waxy casts,"(a) is equal to that of an entire uriniferous tube, and it is evident that the tubes from which these casts have come can have no epithelial lining. The effusion of this material into the tubes appears to be the result of the last effort of secretion,—an effort which suffices to pour out a coagulable material, but not to organise it into cells. The number of these casts which appear in the last stages of the chronic desquamative disease, is very variable in different cases. Sometimes they are only just sufficient to indicate the stage of the disease and the probable condition of the kidney, a few of these casts, with an equally small number of the granular casts being deposited from pale albuminous urine of low density and diminishing quantity. These threatenings of suppression are soon followed by a fatal termination, and the kidneys are found wasted, especially in their cortical portion, nearly all the tubes denuded, and many in process of atrophy, while a few contain the remains of epithelial cells, and here and there one is filled with the same kind of waxy material as formed the large casts. The tube is entirely filled by it, and the new deposit is in immediate contact with the basement membrane. The quantity of this material is so small, that to the naked eye the kidney presents no appearance of a new deposit. The shrinking and atrophy of the gland have resulted simply from the destruction of the secreting cells and the consequent arrest of the circulation. There yet remains to be noticed another modification of the appearances in the urine and in the kidneys dependent on the amount of this new waxy deposit.

The appearances to which I refer were well seen in the case of a man named Revels, of whose kidney I show you a very faithful drawing by Dr. Westmacott.

When this patient first came under my observation about the middle of November, 1847, his urine, which was pale, albuminous, and of low specific gravity, deposited a copious sediment, composed almost entirely of the "granular casts." From the abundance of this deposit I inferred that the disease was making rapid progress. The sediment continued to have the same characters until the middle of December. On the 16th of that month I first observed that some "large waxy casts" were mingled with the "granular" ones, and on the 20th the proportion of the waxy casts had increased. He was now rapidly growing weaker; the dropsy increased; on the 1st January he had symptoms of pericarditis, and on the 11th of January he died.

The cortical substance of the kidney was wasted, and contained a yellowish-white, firm, wax-like material, which formed on the capsular surface, projecting granules varying in size from a pin's head to a pea. On a microscopical examination, some of the tubes were filled with epithelium in various stages of disintegration; a few tubes were denuded, but a great number contained the waxy material which had formed the casts. It was evident that the tubes filled with this material, and more or less contracted and hardened, constituted the firm granulations which projected on the capsular surface.

The first and second figures in Dr. Bright's third plate represent nearly the same condition of kidney as existed in the case of Revels.

(a) The term "waxy" expresses the appearance and not the chemical composition of these casts, which in all probability are of a fibrinous nature.

ORIGINAL COMMUNICATIONS.

ON THE OCCURRENCE OF EXPANSION OF THE CHEST IN THE COURSE OF PNEUMONIA.

WITH SOME REMARKS UPON THE RELATIVE FREQUENCY OF INFLAMMATION OF DIFFERENT PARTS OF THE LUNGS.

By H. FEARNSIDE, M.B. Lond.
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Writers of authority have expressed different opinions respecting the production of dilatation of the chest by an engorged and hepatized lung.

M. Broussais asserted, that the solidified lung might dilate the corresponding side of the chest; and stated that he had sometimes seen the impression of the ribs on inflamed lungs. Laennec combated these statements with great warmth, and denied the possibility of the occurrence. Andral has expressed his belief, that the augmented volume of the lung is only apparent, and that the illusion is due to the lung not shrinking, as in health, when the chest is opened. M. Woillez, relying upon the results of measurement, has taken a similar view of the question. M. Grisolle, the author of the most elaborate inquiry into the phenomena of pneumonia, has admitted the production of augmentation of volume in hepatization of the lung, and also the occasional occurrence of partial or general dilatation of the side. (a) This belief is founded on the observation of two cases in which the sign in question existed.

Dr. Stokes says, with reference to this subject: "The signs of accumulation or visceral displacement are wanting in pneumonia; for, although the observation of Broussais as to the impression of the ribs on the inflamed lung, may be often verified, yet the increase of volume goes no further. The appearance is not constant, and I have only observed it in cases where the whole lung had passed into interstitial suppuration. These depressions are seldom more than three lines in depth; and hence, though their existence shows that some tumefaction has occurred, it is plain that it cannot interfere with diagnosis, and make us confound a solid lung

(a) Traité Pratique de la Pneumonie, p. 226.

with a distended pleura. So far we may agree with Laennec; but his denial, that any tumefaction occurs in pneumonia, is not borne out by observation." (a)

Dr. Walshe admits the occurrence of partial expansion, and remarks, that, in a small minority of cases, he has found positive, though slight, increase of width at the base of the affected side.(b)

Having recently met with a case exemplifying the phenomena under discussion, I have thought it worth placing upon record.

Case.—A woman of middle life, long addicted to intemperate habits, is suddenly attacked by fever, cough, and dyspnœa—expectoration, first viscid and bloody, but on the fourth day, thin, diffluent, and dark brown—signs of expansion of upper part of one side—rapid deterioration, and death on the sixth day. *Post-mortem* appearances: grey hepatization of one lung, which presents marks of the ribs—old tubercular disease in the opposite lung—great enlargement of the liver—granular disease of the kidneys.

B. H., aged 47, a woman of middle stature, florid complexion, and average conformation—long addicted to irregular and intemperate habits—was first seen by me three days after the commencement of her illness. Subject to cough several years previously; her health had been for some time, to all appearance, vigorous and robust. On Saturday, July 28th, being overheated in the performance of her household work, she sat down in a draught of cool air. A few hours afterwards she was seized with shivering and pain in the right side of the chest, which were speedily followed by cough and difficulty of breathing, thirst and heat of skin, and she expectorated a fluid described as viscid and bloody. She took some aperient medicine, but had not recourse to any other means of relief.

On Tuesday, July 31st, I found her in bed, lying upon her back; her face was darkly flushed; her skin hot and dry; her breathing short, and 48 per minute; her pulse rather small, but firm, and 116 per minute. On examining the chest, the motion of the right side was seen to be very imperfect, and that of the left much exaggerated. The right also, throughout the whole of its extent, manifested a greater prominence and fulness than the left, and this was very apparent immediately beneath the clavicle. On percussion the whole of the right side was remarkably dull, and this was even more marked above than below the mamma; the left side of the chest was normally resonant, except over the infra-clavicular space, where the sound was slightly deadened. The respiratory sounds over the upper part of the right side were feeble, especially in inspiration; dry, bronchial, and of a distant character; in expiration they were more audible, and purely tubular; over the lower part of the lung they were less distinctly bronchial, and some sub-mucous rhonchus was heard. The voice resounded loudly over the upper half of the right side of the chest. On the left side the breathing was puerile, and the vocal resonance natural. She was harrassed by frequent cough, and expectorated (on the fourth day) a considerable quantity of a thin, diffluent, dark-brown fluid. She complained of headache, and was slightly delirious at night. The bowels were open, the urine exceedingly scanty and high coloured; the tongue covered with a yellowish-brown fur. On examining the abdomen, the liver was found to be much enlarged, descending into the right iliac region.

Treatment and Progress of the Case.—Mercury was exhibited, both externally and internally; in the latter case combined with antimony and opium, and a blister was applied to the right side of the chest. The patient, however, very soon gave indications of failure in the vital power; the pulse became weaker, the breathing more difficult, the face more congested, and the delirium more constant. Under these circumstances, recourse was had to carbonate of ammonia, camphor, and senega, while an attempt was made to sustain her strength by wine and beef tea. But these means were altogether fruitless, the patient gradually sank, and died on Friday night, six days after the commencement of her illness.

Examination of the Body Twelve Hours after Death.—There was not much emaciation; the limbs were very rigid; the interior of the body was warm.

Chest.—There were slight recent adhesions between the pulmonary and parietal pleuræ on the right side, and several strong old adhesions on the left side.

The *right lung* was very heavy and voluminous, and was estimated to be at least four times its ordinary weight; its surface was generally smooth, and presented but little recent lymph, but over its upper half it was indented by the ribs, which had produced a series of furrows, probably of the depth of an eighth of an inch. The lung was firm and solid, not very friable, sinking readily in water; on a section it presented a dark grey colour, and the surfaces were finely granular; there was no softening in any part; the condensation was less complete in the lower lobe, and especially in its inferior portion, than in the two upper.

In the apex of the *left lung* were found two hard nodules, each of the size of a hazel nut, which on incision presented a blackish, stellated, semi-cartilaginous aspect, the cut surfaces being traversed by fine white lines. In the immediate neighbourhood of these bodies was a cavity which might have contained a small walnut, lined by a rather thick fibrinous membrane, and containing a little calcareous matter of the consistence of mortar. The rest of the lung was healthy.

The *liver* was very large, extending considerably below the umbilicus; it was also very firm and dense; on a section, the cut surfaces presented a yellowish-brown colour, and the lobules were very indistinct, and in some parts so encroached upon by the new matter deposited between them as to be indistinguishable.

The *kidneys* were larger than natural. On stripping off their capsules, the cortical substance was left somewhat uneven and irregular, in consequence of the deposit in grains of a greyish-brown substance, which extended throughout the whole of the superficial part of the organ. Their colour was paler, their texture softer, than natural.

Remarks.—In the case just detailed, the infra-clavicular bulging observed during life, and the impression of the ribs upon the lung, seen after death, can be attributed only to one and the same cause—the tumefaction of the lung.

A knowledge of the fact, that such appearances may manifest themselves in the course of pneumonia is more interesting on its own account than susceptible of application to diagnosis and practice. Their occurrence is confessedly rare, and the accompanying signs and symptoms too characteristic to admit of the case being confounded with examples of other diseases attended with expansion of the chest, as pleurisy or thoracic tumours.

It may be remarked, in passing, that by analogy the history before us affords a confirmation of the statement of Dr. Chambers relative to the occasional occurrence of subclavicular prominence in the first stage of phthisis, and in reference to which doubt has been expressed by some writers.(a)

But the case above narrated presents several features of interest in addition to those for which it was specially cited; upon some of these a few observations will be made.

Of late years some teachers and writers have dwelt strongly upon the situation of pulmonary solidification as an important element in the diagnosis of its nature; condensation of the upper part of the lungs being considered as almost invariably caused by tubercular deposition, and that of the lower lobes as the result of inflammation.

This view was entertained by Laennec, but less confidently asserted by that great man than by some of his followers. He stated, that "the lower parts of the lungs are those most commonly occupied by peripneumonia; and when the disease involves the whole viscus, it is almost always in the inferior part that it commences." (b)

But Andral states, that out of 88 cases of pneumonia, the lower lobes were affected in 47, the upper in 30, and the whole lung in 11.(c) He also remarks that pneumonia, chronic from its commencement, has been seen by him more frequently in the upper lobes than elsewhere.

Chomel observed that, in 59 cases, the upper lobes were affected in 13, the lower in 11, the whole of one lung in 31, the middle in 1, and the posterior border in 2.(d)

M. Broussais says, that since the publication of Laennec's book, his pupils have often shown him cases of hepatization of the upper lobes.(e)

(a) Treatise on Diseases of the Chest, p. 328.
(b) Treatise on Diseases of the Lungs and Heart, p. 317.

(a) *Monthly Journal of Medical Science*, Feb., 1851., p. 182.
(b) Forbes's Translation (Third Edition), p. 204.
(c) Clinique Médicale, Tom. III., p. 470
(d) Dict. de Médecine, Tom XVII., p. 209.
(e) Examen, Tom. II., p 720.

Frank's experience is also opposed to the views generally entertained:—"*Frequentius forte superiores pulmonum lobos inflammatos deteximus.*"(a)

Of 264 patients examined by M. Grisolle, the inflammation commenced in the lower lobes in 133, in the summit in 101, and in the centre of the organ in 30.(b)

Dr. Stokes remarks, "Although pneumonia commences in the lower lobes in a much greater proportion than in the upper, we may often see the disease under the latter circumstances; and it is a curious fact, that we have observed an epidemic tendency to pneumonia of the upper lobes. Thus, during the summer of 1833, a great number of cases of this description occurred in the Meath Hospital. The disease was, in almost all cases, of the typhoid character, and in the adult male subject. I have seen it, however, in females, and not unfrequently in children, in whom it is often mistaken for phthisis."(c) M. Grisolle has also observed, that inflammation of the upper lobes is much more common in some years and seasons than in others.

In the case upon which these comments are founded, the upper half of the lung was the part chiefly involved, the lower being comparatively little affected.

From what has been stated, we may conclude, that inflammation, although more common in the base than in the apex of the lung, is not so rare in the latter situation as is sometimes supposed; and a knowledge of the fact should be kept in mind in estimating the nature of any consolidation in the upper part of the lungs. It is probable, that not only in children, as remarked by Dr. Stokes, but also in adults, cases of chronic pneumonia of the upper parts of the lungs have been supposed to be examples of phthisis; and some of the discordance of opinion as to the curability of the latter disease may thus be accounted for. Such instances have fallen under my notice, and on a future occasion I purpose making them public.

The amount of dyspnœa occasioned by pneumonia varies much. It has been supposed, everthing else being equal, to be more severe in inflammation of the upper than in inflammation of the lower lobes.(d) As far as it goes, the case under review affords support to this idea, for from the first the breathing was much embarrassed, and eventually became exceedingly difficult.

The expectoration presented the same characters as those often observed in cases of grey hepatization of the lung, closely resembling diluted prune-juice or liquorice-water.

With reference to the expectoration in the third stage of pneumonia, Dr. Stokes remarks, "that it is generally characteristic; it then occurs under two forms; in the one we observe a purplish-red muco-puriform fluid, while in the other we find that the matter coughed up has all the characters of the laudable pus of authors."(e) He states also, that, as far as he has observed, there is no anatomical difference between the cases with prune-juice sputa, and those in which there is a secretion of healthy pus; but it will often be found, that in the former case the disease exists in a lower type, and in broken-down constitutions, while he has never seen the latter except in cases of active pneumonia in young and robust individuals.

Andral states, that of persons who had died from inflammation, in which the lung had passed into the state of grey hepatization, some had entirely ceased to expectorate in the last stage of their illness; others had coughed up grey, inodorous, purulent matter; and in some the expectoration had remained as in the stage of red hepatization. Again, in a certain number, the expectoration resembled gum-water, in colour varying from brown to black, like the juice of liquorice or prunes. But he says, that expectoration of the character just mentioned is not an infallible sign of the existence of grey hepatization, as he has seen it during the second, and even during the first, stage of pneumonia(f) M. Grisolle is of opinion, that the prune-juice expectoration *most frequently* indicates the existence of grey hepatization. (g)

The rapidity with which *complete solidification* of the lung had taken place, reminds us of similar occurrences in the course of fever. Already, on the third day, the lung was perfectly solid. Andral remarks, that grey hepatization of the lung may take place in a very short space of time, and that he has observed it before the end of the fifth day.

The *prognosis* in this case was from the first exceedingly grave. Some years ago, M. Chomel expressed the opinion, that patients affected with pneumonia, and expectorating the dark-brown fluid described above, invariably perished. That this is not always the case, is proved by the fact, that of nine patients under the care of M. Andral, who presented this expectoration, two recovered. But, considering the high authority of M. Chomel, the observation in question shows the great importance of the sign.

A few words upon the *post-mortem* appearances will conclude these remarks. The right lung presented an excellent specimen of grey hepatization; it was much enlarged and increased in weight by the effusion into the air-cells and smaller tubes of its upper lobe of lymph which as yet had not begun to soften. The apex of the left lung exhibited the relics and effects of former tubercular disease, which probably existed many years previously, when, as the history informs us, the patient suffered for a time from cough. Exact observations are wanting to enable us to estimate accurately the nature of the irregular semi-cartilaginous indurations so commonly met with in the summits of the lungs, and of which the case before us afforded two examples. The existence of a cavity in the lung, so long after all symptoms of pulmonary disease had ceased, is interesting and instructive, from its bearing upon the question of the closure of pulmonary caverns, and the mode of cure in recoveries from phthisis. The liver was much enlarged, in consequence of the deposit between its lobules of new matter of an oleo-albuminous nature. The deposit was uniform throughout the organ, and in some places greatly encroached upon, and almost obliterated the lobules between which it had been effused. In considering the causes of this change of structure, it will be remembered, that for many years the patient had led a very intemperate life. Probably, from the operation of the same agencies, the kidneys had also undergone an alteration in texture; they were increased in size and weight by the presence between the cortical tubules of a foreign deposit, similar in character to that found in the liver, and which must have interfered with their functions during life.

The diseased condition of these grand emunctories, and the consequent vitiated state of the blood, will throw some light upon the rapid course of the pulmonary affection, and the facility with which the patient succumbed to its power.

(a) De Cur. Hom. Morb., Tom. II., p. 132, quoted from Dr. Forbes's Translation of Laennec's Treatise.
(b) Traité de la Pneumonie, p. 34.
(c) On Diseases of the Chest, p. 319.
(d) Andral; Clinique Médicale, Tome III., p. 431.
(e) On Diseases of the Chest, p. 322
(f) Clinique Médicale, Tome III., p. 499.
(g) Traite de la Pneumonie, p. 540.

HOMŒOPATHIC HOSPITAL STATISTICS.

By W. T. GAIRDNER. M.D.

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I am tempted to publish some notes on the subject of homœopathic hospital statistics, which were prepared by me six years ago for my own satisfaction, and which give, I think, a clearer view of the character of these mendacious documents than anything yet published. To one practically acquainted with the mechanism of hospital statistics, the following arguments will appear superfluous; and, indeed, I should consider them unworthy of publication, were it not apparent that many minds have been stunned and confused by the circumstantial character of the evidence so assiduously kept before the eyes of the public by the professors of quackery, and backed by the indiscreet concessions of some of the avowed friends of science. Homœopathy has, in fact, found out the soft side of the present age, and, in working up its delusive "experience" into the form of statistical statements, has applied itself with great dexterity to meet the requirements of that inductive and numerical method which so largely prevails, and is often so blindly followed in our science. There are still too many cultivators of medicine in all its departments, who "strain at a gnat," in the shape of what they call speculation or theory, but are ready to swallow any amount of doctrine which professes to be founded simply on facts; and there are not a few, with whom, especially in therapeutics, a neatly elaborated statistical document is at all times sufficient to outweigh the principles and experience of centuries, if not written in hundreds, and tens, and units. For my own part, I am convinced, that a blunder or a lie is

no whit less untrue when repeated a thousand-fold, mixed up with a questionable amount of truth, and published in a heterogeneous mass of statistics, than if it had been placed before the world in an isolated form. If good faith, sound judgment, and mature experience, be not at the root of an appeal to my convictions, the mere accumulation of instances, and their apparently exact statement in numbers, appears to me only the statement of cumulative error, in which the bias, the blunders, the dishonesty of the recorder may be assumed to be concealed by the difficulty of removing the rubbish he has collected around them. It is enough, with respect to homœopathic statistics, to know that they are collected by a few obscure hospital physicians, from cases selected, named, and treated without control, with the single object of procuring facts in aid of a preconceived therapeutical dogma, and with the knowledge that the organs of quackery are prepared to carry the results all over Europe to the public ear as an indubitable triumph. Suppose Dr. Fleischmann, for instance, to have selected and written down his cases under the same curious views of scientific morality which dictated the following appeal to ignorance against science, by a "regular and well-educated (homœopathic) physician."—"Common sense is quite competent to decide which of two systems of treatment is the best; that which has the greatest number of recoveries or that which has not." Are the facts collected under this view of the requirements of science likely to be scrutinised with the scepticism and judicial impartiality necessary, even in an honest mind, to produce a correct result? Or are we not rather justified in ascribing, *à priori*, to statements so collected and so guaranteed, the errors and vices of the most unscrupulous partizanship? The "facts" of Professor Holloway are attested by more impartial witnesses; the balance-sheet of Mr. Hudson had a far greater appearance of numerical exactness.

Let us assume, however, for a moment, that the "facts" of these boasted statistics are entitled to be received within the domain of science, and to be subjected to its ordinary processes of analysis. Let us make, for the sake of argument, the enormous concession, that the framers of homœopathic statistics, unlike all other crotchet-mongers, have proceeded with judicial impartiality and unerring accuracy in the naming of their cases, and have entirely avoided the temptations to "make things pleasant" by applying the most formidable names in the nosology to comparatively slight diseases. Let us admit that the deaths, admissions, etc., are correctly stated as to numbers; that every patient recorded as cured went forth rejoicing into society without a trace of his disorder remaining; and, in short, that the whole statement is constructed as if it had never occurred to Dr. Fleischmann and his coadjutors, any more than to an ordinary hospital physician, that the stability of his system depended upon the results he could show to the public and to his government; after all these admissions, what is the real scientific result of the homœopathic statistics? I do not hesitate to declare it to be my belief, after careful consideration of the subject, that the ratio of mortality, under the circumstances narrated, is enormously high. To prove my position, let me request your readers to follow me into a few details, which I venture to promise will be found easy to follow and to apply, and consequently equally easy, if erroneously applied, to confute.

The statistical homœopaths are clamorous in their demands for a comparison between the results of homœopathic and what they insultingly nickname *allopathic* hospitals. They point triumphantly to the contrast between Dr. Fleischmann's Hospital, at Vienna, conducted on their principles, and the general hospital of the same city, in which the ordinary treatment of disease, diversified to some extent by Dr. Skoda's do-nothing system, is supreme. The disingenuousness of this comparison is of a piece with that of the appeal to public ignorance against the conclusions of science to which I have alluded in a former part of this communication. Every one familiar with the routine of hospitals knows well, that a large, well-known, and accessible institution, such as the recognised general hospital of a metropolis, will inevitably attract into its wards the most desperate, the most poverty-stricken, the most abandoned and forlorn cases to be found within its range, and will, by the very fact of withdrawing these, tend to improve the mortality-list of other smaller and less central institutions. The Hôtel Dieu at Paris, the Santo Spirito at Rome, Guy's, and others in London, attain in this way a high ratio of mortality, simply by the fact, that these are the popular hospitals of their respective districts. Indeed, their influence is often felt in this respect far beyond the limits of the town in which they are placed. There is not a shadow of a doubt that the principal hospitals of London, Birmingham, Liverpool, Manchester, Edinburgh, and Glasgow absorb, so to speak, a large portion of the mortality of multitudes of provincial hospitals all over this kingdom. Compare, for instance, the average mortality of thirty provincial hospitals in England (1·16) with that of fourteen taken indiscriminately from London and some of the considerable towns (7·79). (a) The difference here, though nearly 75 per cent., is not by any means so great as might legitimately be shown, as many of the towns enumerated in the second list are, to some extent, under the protective influence of still more populous communities and more frequented hospitals. Thus, Addenbrooke Hospital, Cambridge, has a mortality of 2·4 per cent.; Canterbury, 2·0; Exeter, 3·2, &c.; while the great hospitals of London, Manchester, Edinburgh, Glasgow, vary between 5 and 12 per cent. of ordinary mortality.

If I were to give a formula for the arrangements of an hospital designed to exhibit a low rate of mortality, it would be this: Choose your site well; let it be not *in*, but *near*, a large city having already hospital accommodation on a prodigious scale, well known to the poorest classes of the community, and adapted to their wants; let the distance from the centre be such (say three miles) as will keep back the extremely abject and the dangerously diseased, either through want of knowledge of your institution, or want of power to reach it; let the arrangements be so perfect as to contrast favourably with the older hospitals, and to attract the valetudinarians, whose illnesses and means permit them to avail themselves of its superior accommodation; and, finally, let some special practice be pursued, in order to enlist the sympathies of rich or idle *dilettanti*, who will know how to fill your wards with the sort of cases suitable for your experiment. This is precisely the picture of the Vienna Homœopathic Hospital, which has the amazing effrontery to call upon us to compare its peddling *experiments* with the great labours of pure beneficence, of which general hospitals of this and other countries furnish examples. Such experiments, of which the means are human sufferings and dangers, and the avowed and foregone conclusion is the exaltation and triumph of a sect, surely argue anything but the charity which "is not puffed up" and "seeketh not her own."

But, whether right or wrong, the experiment has been made, the challenge is before the public, and I am prepared to meet it by a comparison of the results of Fleischmann's with those of other hospitals. I fix upon Fleischmann's because it is necessary to *my* sense (though not probably to that "common sense" which is "quite competent to decide," &c.) to go a little into detail; and what can be shown to be true of the Vienna experiment (the first and the most triumphantly paraded) may probably be assumed to be true of others. I shall take, then, the eight years of Fleischmann's Hospital, from 1835 to 1843, (the results of which are given at length in the work of Drs. Drysdale and Russell, and partially in Dr. Forbes's celebrated review,) and I shall compare them with the results of two years in the Edinburgh Infirmary (1842-3), in which the aggregate number of "experiments" happens nearly to coincide with that of the Vienna hospital in the eight years mentioned. The returns in Edinburgh for these years were drawn up by Dr. Peacock, now of St. Thomas's Hospital, whose name is a guarantee at once for their business-like accuracy and their good faith, so far is these could be secured by him. Let me add, that I am guided in my selection exclusively by the circumstances above mentioned. If the Vienna General Hospital, or any other, can be shown to reverse my conclusions, I shall unquestionably feel myself bound to admit the fallacies of my argument; but in the meantime I am taking at least no unfair advantage in comparing results which have lately been declared on high homœopathic authority, "*far beyond the reach of any other known method of treatment*," with those of the hospital which has the reputation of the most open doors, and the highest mortality in this country.

In the works already referred to, the aggregate of cases in

(a) Statistics of Civil Hospitals, by J. Thomson, Esq., *Medical and Surgical Journal*, 1843, Vol LX. The succeeding calculations in this paragraph are from the same paper.

Dr. Fleischmann's Hospital is stated at 6551 (including 27 cases remaining from 1834); deducting 50 which remained in the house at the end of 1843, the aggregate number treated and dismissed was 6501. Of these 407 died; a mortality per cent. of 6·26, or a little more than 6¼. In Edinburgh the numbers were:—

In 1842 total number	3529	Deaths	443	or 12·5 per cent.
In 1843 „	2840	„	315	„ 11·0 „
In both years	6369	„	758	„ 11·9 „

But from this aggregate it is right to deduct the fevers, which constitute a very large and *fluctuating* portion of the diseases in both hospitals. Accordingly we have—

	Vienna.	Edinburgh.
Total cases	6501	6369
Deduct fevers	1855	1822
	4616	4547

And if now we allow for a few more cases of epidemic disease, which are in larger proportion in Vienna, during the period referred to, than in Edinburgh, it will be observed, that the list of what may be considered as sporadic or non-epidemic diseases presents a very close approximation, in its aggregate numbers, in the two returns. Not so the mortality, which is 5·46 per cent. greater in Edinburgh, or not very far from double that of Vienna. Nay, for sporadic diseases, I am willing to call it *double*, since the fevers in Vienna, having a mortality of 8·46, tend to exalt the total mortality; while in Edinburgh they leave it almost unaltered, giving in the respective years a mortality of 12·5 and 11·1 per cent. Such is the homœopathic triumph, *primâ facie;* and this is the usual nature of the appeal to "common sense," which, though so eminently "competent to decide," seldom travels (in homœopathic company) much further than to a conclusion of the above kind. I have, however, a little further appeal to common sense.

If any one familiar with the diseases of European countries were asked what were the chief sources of mortality, especially in our hospitals, (apart from epidemic diseases,) he would at once answer, without hesitation, phthisis pulmonalis, disease of the heart, Bright's disease of the kidney, apoplexy, paralysis, and softening of the brain, and, in a less degree, organic disease of the liver. These diseases are not only among the most frequent, but they are by far the most intractable, in our hospital lists. Excluding epidemics, I believe I should not go far wrong in saying, that in Edinburgh Infirmary the diseases I have named make up half the deaths, and the first disease alone about a quarter of them. Nor does the proportion appear to be very widely different in the Vienna *General* Hospital, except that phthisis has a higher proportion to the other diseases, causing about one-third of the entire mortality, epidemics included.(a) These diseases are the *opprobria medicorum*, and (to follow up my former advice) I should advise the managers of an hospital solicitous about appearances, by all means to steer clear of them. How successfully this has been done in the Homœopathic Hospital will be seen in the following comparison. In the nearly equal aggregates of cases above noted we have the following numbers of these diseases admitted:—

	Edinburgh.	Vienna Homœopathic.
Phthisis pulmonalis ..	.. 276	98
Disease (organic) of heart	.. 159	15
Bright's disease of kidney	.. 82	0 (!)
Paralysis	.. 103	5
Apoplexy	.. 14	9
Disease (organic) of liver	.. 33	1
	667	128

All commentary upon this is unnecessary; the numbers speak for themselves. The whole number of these really fatal diseases, according to the returns of both hospitals, is between five and six times as great in the Edinburgh institution devoted to the relief of the sick, as in the Vienna one devoted to the glorification of homœopathy by *experiment!* The most fatal and most frequent disease of northern latitudes is nearly three times as numerous; the next in fatality and frequency ten times as numerous; a third almost equally formidable indefinitely more numerous in Edinburgh, inasmuch as this last does not appear in the homœopathic returns at all!

In order, however, to make the conclusions which legitimately spring from this investigation more completely irresistible, I have had the curiosity to make a few further selections from the returns. I give below the remaining instances in which the Edinburgh proportion of cases materially exceeds the homœopathic. As if by magic, they turn out to be, with but two exceptions, the most intractable enemies with which the practitioner has to deal. They are as follows:—

	Edinburgh.	Vienna Homœopathic.
Neuralgia	.. 14	0
Iotemal Aneurism..	.. 18	1
Diabetes Mellitus ..	.. 17	0
Amaurosis	.. 15	0
Caries and Necrosis	.. 57	5
Malignant Tumours	.. 55	0
Other Tumours ..	.. 36	0
Bronchitis (acute) ..	.. 118	15
Rheumatism (acute and chronic)..	313	188

Of these last items, I have more to say immediately; meantime, by way of contrast, and to show, if possible, still more conclusively the principle on which homœopathic cases are selected for treatment, I shall reverse the picture, and give a list of the diseases which predominate to a large extent in Fleischmann's Hospital.

	Vienna Homœopathic.	Edinburgh.
Chlorosis (and amenorrhœa)	.. 90	48
Cholera	.. 24	2
Colic	.. 45	10
Diarrhœa	.. 114	28
Dysentery	.. 41	16
Erysipelas and Erythema..	.. 212	82
Gout	.. 140	0
Hæmoptysis	.. 50	8
Headache	.. 61	37
Herpes	.. 20	1
Inflammation of brain ..	.. 17	8
Endocarditis	.. 29	(?)
Pneumonia	.. 300	83
Pleuritis	.. 224	32
Peritonitis	.. 105	19
Cynanche tonsillaris ..	.. 301	34
Influenza	.. 52	0
Varicella	.. 110	2

The predominance of influenza is evidently owing to the period embraced by the returns having included an epidemic visitation of this disease. Possibly the number of cases of cholera, diarrhœa, and dysentery, (or what may have passed under the latter name,) and of erysipelas, may have had a similar explanation. But what is the rest of this list, which forms the staple of the homœopathic experiment? Is it not composed, without an exception, of the *curable*, often of the *easily and constantly curable* diseases of the economy? Nay, is it not plain to the most ordinary allowance of common sense, that cases have been admitted by dozens, probably by hundreds, for no other purpose than to contribute to the success of the experiment, and to swell the triumph of homœopathy? I cannot imagine to what purpose else we have 300 cases of sore-throat, and 20 of herpes; (a) diseases which are rarely, except in the most special cases, admitted into any of our great hospitals in this country, on account of the pressure of the more severe and fatal diseases to which, as shown above, our doors are thrown open, while our experimentalists turn their backs on them, or least give them the cold shoulder! To be sure they are ugly subjects for curative experiments, these same phthisical cases, and organic diseases of heart, liver, and kidney; and, whatever one may think of the honesty, no one can doubt the prudence of giving the preference to sore throats and shingles, as well as to catarrh, dyspepsia, colic, headache, and a host of the minor ills which will be found to be numerically strong in the returns.

(a) See the returns of Dr. Haller in the "Zeitschrift der K. K. Gesellschaft, etc., zu Wien." I have before me the returns for 1848, in which phthisis gives 984 out of 2808 deaths.

(a) Varicella might be added, but this disease, being contagious, ought certainly to be admitted more largely with us. For those above mentioned there is no excuse; they ought scarcely ever to be hospital diseases, except when allied to others. In the General Hospital of Vienna, in 1848, with three times the number of admissions (21,409) there are but 216 cases of inflammation connected with the mouth, gums, teeth, palate, or tonsils; about one-third less than the above cases of cynanche alone!

And now I assert, without fear of contradiction, that the homœopathic returns are not only void of triumph to the system, but that they cover it with disgrace. With such a selection of cases as I have shown above, I maintain they ought to have reduced their mortality to a far lower point than they have done. It is of no use to quote alleged cures of pneumonia or pleurisy, and to demand comparisons with "the best hospital physicians who use allopathic remedies." I think we are justified in believing that the cases of individual disease, like the general returns, are a sham and a fraud; and that the contrast between pneumonia at a homœopathic hospital, and pneumonia in the Edinburgh Infirmary, would be, if we could get to the root of the matter, as great as between the general lists in the one and the other hospital. Every one who has gone about the wards of an hospital in search of crepitant râles and dulness on percussion, knows that there is nothing so easy to find or so often cured as the slighter degrees of what may be technically called pneumonia; and as to pleuritis, if we may trust the evidence of *post-mortem* examination, its simpler forms must be of immense frequency; so that if our scrupulous experimentalists chose to place everything which we commonly term rheumatic stitch under that convenient and formidable-looking designation, it would not be easy to prove them wrong. They have, however, betrayed themselves in one point;—in giving the cipher of 300 to pneumonia, and only 15 to the far more frequent disease, bronchitis, (a) they have committed what, according to Napoleon, is "worse than a crime—a blunder;" showing that it requires a more adroit management than even that of our experimentalists, to manufacture statistics of plausible and serious aspect from the miniature types of disease by which they (very judiciously) think proper to test the efficacy of their system.

I feel that it is useless to enter into further details as to this statistical fraud. It is, I hope, abundantly evident, that, even supposing the numbers to be correctly stated, and the docketting of the cases to have been free from objection, the character of them, as reported, is such as to imply selection; and, on the other hand, it is next to certain, that no dependence whatever can be placed on the statements of the reports, in regard to the nomenclature of diseases. We have, therefore, only to deal with the fact, that an hospital in which there is reason to think that the vast majority of the cases were of the most trivial description, has a mortality of 6·26 per cent.; and that the interested partizans of the system therein pursued, demand for this result the palm of an unquestionable superiority, or (in the words of one of their leaders,) proclaim it "far beyond the reach of any other known method of treatment." To this it is enough to answer, that many hospitals in England have an average mortality much below that above mentioned; I have already instanced three of these, (Canterbury, 2·0 per cent.; Cambridge, 2·4; Exeter, 3·2.) I might add, that of eight district general hospitals in Scotland, noticed in the article by Mr. Thomson, already referred to, three have a smaller mortality than the homœopathic institution, viz., Dundee, 5·10 per cent.; Aberdeen, 4·66 per cent.; and Inverness, 4·36 per cent. All of these hospitals are, like that of Edinburgh, recipients of a considerable proportion of incurable cases, and I do not believe that any of them admit 5 per cent. of cases of cynanche tonsillaris. I am not so well acquainted with the class of cases admitted into English provincial hospitals; but, in a list of thirty of these institutions in the paper above referred to (from materials in the *British Almanack* for 1836-7,) *there are only two whose mortality is not less* than that of the Homœopathic Hospital of Vienna, and the average mortality of the whole thirty (4·16) is less by nearly a third. So that the unprecedented success of homœopathic treatment is not only a very ordinary and moderate success as compared with hospitals in general, but as compared with hospitals of the size of Fleischmann's (fifty beds) it would be found to be a positive failure; and doubly, trebly a failure, when we take into consideration all the facts revealed in the preceding part of this letter.

Before concluding, I cannot resist alluding to one other subject,—I mean the proportion of cures. In the record of a death, it is impossible to show any bias, or in any way to deviate from accuracy without gross falsehood, with correspondingly great risk of detection. But, in the column of cures in this hospital may be read the character of the whole of its records. The alleged cures in the Vienna Homœopathic Hospital are 92 per cent. of the whole cases; and, as the deaths are 6·25 per cent., it follows that there is actually *scarcely any medium between death and cure!* To any one who knows what hospital cases are, or should be, this simple statement proves rather more than was intended. Compare it with the returns of any hospital which has no system to support—I choose Dumfries, simply because its mortality is identical with that of Fleischmann's Hospital:—

	Cures per Cent.	Deaths per Cent.
Fleischmann's Hospital..	.. 92·	6·26
Dumfries ,, ..	.. 76·02	6·26

Alas for the

"Vaulting ambition, that o'erleaps itself,
And falls"

on the other side of truth and probability! In straining every nerve after this ideal and fictitious ratio of cures, Dr. Fleischmann unluckily forgot the following ugly dilemma: If, from the excellence of his art, or any other cause, he was enabled to cure 16 per cent. more than Dumfries, why was his skill not equally effective in reducing the mortality? There can be only two answers to this question, and we may give the homœopathists their choice of them. Either the cases were really curable in enormous proportion, and the homœopathic art is responsible for a mortality which must be considered, under these circumstances, quite appalling; or the alleged cures are a mockery and a delusion, inconsistent with nature and fact, and cunningly dressed up for the undiscriminating wonder of the multitude. To apply an uncharitable judgment of Dr. Fleischmann's to his own case, "*Curantur in libris—moriuntur in lectis.*"

And now I leave the question of the results of homœopathic hospital treatment, without hesitation, to the judgment of "common sense." I only stipulate that "common sense" will take the trouble to make herself acquainted with the facts of the case as stated and analysed above, and will protect and arm herself against sophistry and disingenuousness by an alliance with another equally useful personage, "common honesty."

I have performed a task which I felt to be due to the public at this crisis, though by no means agreeable to myself; and I now willingly take leave of the subject, trusting that I may have not wearied the readers of the *Times and Gazette* with the unusual, though necessary, length of my communication.

Edinburgh, March, 1852.

(a) It has been stated that bronchitis is rare in Germany; but surely with very little reason. Not to mention that the German literature of bronchitis is both larger and better than our own, or than that of France, the following are the returns of the Vienna General Hospital:—Catarrhs, (bronchitis, etc.,) 2078; pleuritis, 427; pneumonia, 509; and this out of 21,409 cases. Compare the homœopathic results of 6501 cases, viz., catarrhs, (bronchitis, cough,) 118; pleuritis, 224; pneumonia, 300.

ON THE TREATMENT OF POLYPI OF THE EAR.

By JOSEPH TOYNBEE, Esq., F.R.S.,

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[Concluded from p. 213.]

The third kind of polypus developed in the external auditory meatus is the globular vascular polypus. I have given this name to a growth which differs considerably from those comprised in the two preceding classes, in consisting of a single globular mass, perfectly smooth on its surface, without any appearance of granulations; it is confined to the inner fourth or sixth of the meatus, from the upper part of which it is usually developed, and it hangs down like a curtain, wholly or partially concealing the membrana tympani. It is of a deep red colour, and softer than the common vascular polypus, and it does not generally increase to a larger size than an ordinary pea. This growth generally occurs in children or young persons; it is attended by a mucous discharge, which is generally offensive, and, like the secretion accompanying the other forms of polypus, it consists of epidermoid cells, which give a milky appearance to the water, and also of fine threads of mucus. This kind of polypus may exist during several years without producing any severe symptoms; it has hitherto been comprised under the general term "otorrhœa." It may be distinguished

from the disease I have elsewhere called chronic catarrhal inflammation of the dermoid meatus,(a) in the discharge containing flocculi of mucus, like small particles of thread, and upon its always presenting a red mass at the inner extremity of the meatus. This affection also differs from catarrhal inflammation of the meatus, in not terminating in disease of the bone, the discharge apparently proceeding from the surface of the polypus only, to which part the disease is limited. The affection of the ear with which the globular vascular polypus is most liable to be confounded, is catarrhal inflammation of the mucous membrane of the tympanum. In some of these cases the mucous membrane of the tympanum is of a deep red colour, and so much tumefied that it projects into the meatus for a line or a line and a half beyond the position occupied by the membrana tympani previous to its destruction. Upon examination of the growth by means of a speculum and lamp, it is not easy to determine which of the two diseases above noticed is present. The examination of the discharge is, however, sufficient to decide the question; although in both affections there is floccular mucus present, that accompanying the polypus is composed of small thread-like particles, while that emanating from the mucous membrane of the tympanum presents large, irregular-shaped masses, having generally a yellow colour. The history of the case will also generally aid the surgeon in forming a diagnosis; the vascular globular polypus generally appears without the manifestation of any very decided symptom; perhaps the appearance of the discharge is the first indication of its existence; whereas the affection of the tympanum generally originates in an attack of acute inflammation, and it often arises during scarlet fever or measles.

Treatment.—The treatment of this kind of polypus is much more simple than that of the two species which have been already described; nevertheless, unless the true nature of the disease be ascertained, it is useless to attempt to combat it by the use of the astringent applications ordinarily prescribed to arrest discharges from the ears. This affection stands between the ordinary vascular polypus and catarrhal inflammation of the dermoid meatus; the former is wholly uninfluenced by the use of the strongest astringents; the latter is generally curable by weak solutions of them; the vascular globular polypus is affected by astringent applications, but they require to be of considerable strength. The course of treatment which I am in the habit of following consists in having the meatus of the affected ear syringed out with tepid water, so as to remove all discharge, and after the ear has been turned towards the shoulder of the affected side, to allow of the water running out, three or four drops of an astringent solution are to be dropped into the meatus, and the ear closed for half an hour by a portion of cotton-wool moistened with it. This course may be repeated twice, thrice, or oftener, during the day, care being taken that the sediment from the solution be removed before the drops are again used. The preparations I have used are the acetate of zinc, the acetate of lead, alum, and tannin; but that first named has, I think, answered best. This species of polypus may often be removed in the course of a week, or from that to a fortnight; and, to prevent any congestion in the tympanic cavity, a slight discharge from the surface of the mastoid process has generally been kept up during the time that the astringent solution has been used.

GLOBULAR VASCULAR POLYPUS.—DISCHARGE FOR THREE YEARS.—CURED BY A SOLUTION OF LIQUOR PLUMBI.

Case 7.—Miss F. A., aged 12, of a rather weakly constitution, was brought to consult me on the 30th of March, 1850. Her mother stated, that she had been dull of hearing during several years in the left ear, and this dulness has of late so much increased, that when the right ear is pressed upon the pillow she cannot hear even loud voices. During the last three years there has been a discharge from the ear, which has sometimes been very offensive, and it has been at times of a dark colour, especially in a morning. There has been no complaint of pain in the ear, but a tenderness has been experienced below it. At times there has been pain over the left eyebrow, which has also extended to that side of the head. Upon examination, it was found that the watch (of which the natural hearing distance was three feet) was heard only when placed in contact with the ear. By the aid of the speculum, a globular red growth, like a polypus, was observed to conceal the membrana tympani, with the exception of a small semi-lunar-shaped part at its inferior margin, about half a line in diameter at its centre, which was quite opaque. As this growth did not extend far into the meatus, as it was of a deep red colour, and its surface quite smooth, it presented an appearance very analogous to that of the thickened mucous membrane of the tympanum, which, in some cases, becomes so much hypertrophied as to project into the meatus, and occupies a position nearer to the orifice than did the membrana tympani previous to its destruction. The presence of the membrana tympani was, however, ascertained; by the use of the otoscope, air was heard to enter the tympanic cavity, and it did not pass into the meatus; the small portion of the membrana tympani visible, was observed to be pressed out and rendered tense and more white when the tympanic cavity was filled with air. It was therefore evident that the diseased growth was a polypus.

The treatment pursued consisted in applying to the surface of the polypus thrice daily a solution of the diacetate of lead; and, as I was not to have the opportunity of seeing the patient for between two and three months, it appeared desirable that it should not be so strong as it would otherwise have been advisable to use. The drops were composed of six drops of liquor plumbi to an ounce of water.

June 18.—The discharge has nearly disappeared, and, upon examination, the polypus is reduced to the size of a large pin's head. The hearing was improved, the hearing-distance of the watch being two inches, instead of being heard only when in contact.

I had not an opportunity of seeing this patient again, but some little time after the last visit I heard that the discharge had ceased, and the hearing had so much improved that she was considered cured.

GLOBULAR POLYPUS IN RIGHT EAR.—BROKEN UP BY FORCEPS, AND A SOLUTION OF LIQUOR PLUMBI APPLIED—CURE

Case 8.—Master A. H., aged 16, was first seen by me on the 13th of April, 1850. Both tonsils were enlarged; he had a tendency to glandular enlargements; and was at the time of his visit far from being in strong health. The history of the case was as follows:—At six years of age he suffered from an attack of scarlet fever. Subsequent to it, he was dull of bearing, and this dulness has increased during the last two years and a-half; has had discharge of an offensive character from the right ear during the last eighteen months.

Right Ear.—Upon inspection, a polypus was observed at the inner extremity of the meatus, growing from its upper part near to the membrana tympani; this polypus was red, globular, and having a smooth, shining surface. The discharge, upon being removed from the meatus, was observed to be white, like milk—not viscid; and it consisted of rounded cells, similar to those excreted in catarrhal inflammation of the mucous membrane of the tympanum; the nuclei of these cells were rendered very distinct by the addition of acetic acid. By aid of the otoscope, air is heard to enter the tympanic cavity, and, in so doing, to produce a loud sound, like that attendant upon the sudden distension of a bladder by air. The watch was not heard over the ear; it was heard when pressed on the temple.

Left Ear.—The membrana tympani was dull on its surface and white. Air passed into the tympanic cavity, producing a sound similar to that in the right ear. Hearing distance a quarter of an inch.

April 17.—By means of the rectangular forceps the outer part of the polypus was broken up; it was very sensitive and bled slightly. A solution of diacetate of lead in water (four grains to the ounce) was ordered to be dropped into the ear thrice daily, and a cantharidine cerate was applied to the nape of the neck.

25th.—The discharge much diminished, and its offensive odour has disappeared; the polypus is diminished to one-third of its former size, and the membrana tympani is seen beyond its lower border.

May 4.—Much the same; prescribed a solution of chloride of zinc (ten grains to the ounce) to be dropped into the ear.

16th.—The discharge has disappeared; hearing so greatly improved that he thinks he sometimes hears quite well; the roots of the polypus only remain. This treatment was continued, and when I last saw the patient, on the 13th of September, he was quite well.

(a) "On the Nature and Treatment of those Diseases of the Ear which have been hitherto designated Otorrhœa and Otitis," *Transactions of the Provincial Medical and Surgical Association*, Vol. XVIII.

In the following case I adopted a rather more active plan of treatment. Being aware from actual examination that polypoid growths of the nature now under consideration are extremely soft, in order to remove them more rapidly I resolved to apply to them an astringent of much greater strength than those previously used, and the complete success of this proceeding was very manifest.

GLOBULAR VASCULAR POLYPUS.—DESTROYED BY A STRONG SOLUTION OF ACETATE OF ZINC.

Case 9.—Miss T., aged 21, of fair complexion, and in good health, applied for advice on the 13th of January, 1852. The history of the affection is, that, seventeen years ago, after an abscess behind the right ear, its hearing power considerably diminished and has never returned. Six months ago discharge issued from this ear, and has continued to do so up to the present period without any intermission. Upon examination of the *right ear*, the watch was only heard when in contact; the meatus contained a considerable quantity of discharge, which was found to consist of tenacious thready particles of mucus and mucous cells. At the inner extremity of the tube was a globular shaped polypus of a red colour; it was attached to the upper part of the membranous meatus close to the membrana tympani, which it wholly concealed, with the exception of a small semilunar shaped portion seen at its lower border.

Left Ear.—Hearing distance one inch. Membrana tympani white, like cartilage.

Treatment.—The right ear to be syringed out with tepid water thrice daily, and after each operation four minims of a solution of acetate of zinc (forty grains to the ounce) to be dropped into the ear. A small portion of vesicating paper to be kept applied over each mastoid process.

Jan. 15.—There was slight pain for half an hour after the first three applications of the drops, and yesterday the patient complained of a sensation as if the ears were distended. The discharge is diminished in quantity. The polypus had a greyish colour, bled upon being touched, and appears partially broken up. Large particles of the acetate of zinc had collected on the surface of the polypus.

19th.—Polypus smaller; no discharge; has had considerable aching in the ear. To syringe with warm water, and to omit the use of the drops.

22nd.—The pain has ceased; there is no discharge; the polypus has wholly disappeared. The membrana tympani is now seen; its upper and posterior part is white and thick; at its anterior part there are two small apertures, through which the mucous membrane of the tympanum is seen to be red and thick; the hearing has improved; the watch is now heard by the right ear at a distance of three inches, by the left at a distance of two inches. Subsequent reports from this patient state, that the discharge has not again returned, and that the hearing continues to improve.

CONCLUSION.

In reviewing the foregoing pages on the nature and treatment of the different kinds of polypoid growths in the external meatus, it is evident that no effectual plans can be carried out for their removal, unless a careful diagnosis be first made, as the remedies which will effectually remove one species of polypus are found to have no influence upon others. This diagnosis is made without difficulty by means of a lamp and speculum after the use of the syringe. The lamp which I should recommend to the surgeon when he sees patients from home, is the efficient and inexpensive one made by Mr. Miller, of 179 Piccadilly. It does not require the use of gas or fluid; it is very portable, and of use not only for the ear, but for the eye, mouth, and throat—indeed for any purpose for which a strong light is required. When the surgeon is seeing his patient at home, and can have the advantage of gas, Mr. Avery's lamp is to be preferred.

18, Savile-row.

Supply of Water to the Metropolis.—Lord Ebrington moved in the House of Commons, that it be an instruction to the Committee on the Metropolitan Water Supply Bill, to cause inquiry to be made into the cost of bringing into the Metropolis a supply of soft water from the sources recommended by the Earl of Carlisle and his colleagues of the Board of Health, and to report thereon, before they proceed to consider that Bill, and the various other Water Bills referred to them. The proposal was objected to, and finally withdrawn.

SCIENTIFIC LECTURES.

HUNTERIAN LECTURES ON THE ANATOMY OF INVERTEBRATE ANIMALS.

BY RICHARD OWEN, F.R.S.,
Hunterian Professor to the College.

Tuesday, April 6, and Thursday, April 8.—Lectures X. and XI.—*Acalephæ.* Indications of the affinity of the Polypi to the Acalephæ by their metamorphoses: class-characters of Acalephæ; their distribution into the orders Physogradæ, Ciliogradæ, and Pulmogradæ. Difficulty of applying the Cuvierian principle of classification to metagenetic animals. Supposed paradoxical characters of the Acalephæ. Hunter's illustrations of their anatomy. Digestive and chylaqueous systems in the Rhizostoma and Cyaniæa. Tesselated epithelium of skin; ciliated epithelium of nutrient cavities and canals; urticating and dart-cells. Marginal, oral, and genital tentacles. Muscular fibres. Nervous system and supposed organs of sense. Organs of motion in the Ciliogrades: extreme contractility and varied muscular force of the long tentacles of the Beroidæ, their digestive and chylaqueous systems: their alleged nerves and organs of sense. Peculiarities of the Physogrades order exemplified in the Physalia, Velella, and Porpita: internal calcareous skeleton of the latter. Only the more simple forms and larval individuals propagate by gemmation and spontaneous fission. Androgynous generative organs of Cydippe. Rapid development and brief duration of the ovaria and testes in the diœcious Medusæ; multiplied marsupial pouches of the female. Development of the fasciculate spermatozoa, and of the ova. Many individuals propagated from one ovum, by gemmation and spontaneous fission of larval forms that successively typify the Monad, the Rotifer, and the Polype before the oviparous Medusa is finally developed.

Saturday, April 10, and Tuesday, April 13.—Lectures XII. and XIII.—*Echinodermata.* Progressive variation of the external characters of this class. Its different orders, Crinoidea, Asteroidea, Echinoidea, Holothurioidea, Sipunculoidea. Complex external skeletons of the star-fish and sea-urchin. Pedicellariæ. Organs of motion and adhesion. Nervous system of Asterias, Echinus, Spatangus, and Holothuria. Digestive system of Asterias, Comatula, Echinus, Holothuria, and Sipunculus. Vascular system. Respiratory organs of Holothuria. Spontaneous fission of the Ophiuræ (brittle-stars) and Holothuriæ. Alleged gyoandrism of Synapta; Muller's discovery of embryo univalve mollusca in that genus. All other known Echinoderms diœcious. Multiplied testes and ovaria of Crinoids. Generative organs of Asterias, Echinus, and Holothuria. Development of the ovum and germ. Metamorphoses of the Echinodermata. Larval Pentacrinus of Comatula. Ciliated monadiform embryo and pedunculate larva of star-fish. Larval Pluteus of Ophiura and Echinus. Metamorphoses of Holothuria. Predominance of fossil larval forms of Echinodermata in secondary strata.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening,	April 3.	Medical Society of London. *Subject*:—Dr. Bauer, "On Spinal Curvature, with Especial Regard to the Treatment now Pursued in Germany." Eight o'Clock.
——	——	Royal Institution. *Subject*:—Professor Brande, "On Some of the Arts connected with Organic Chemistry." Three o'Clock.
Monday,	April	5.—Chemical Society. Eight o'Clock.
——	——	Epidemiological Society. Half-past Eight o'Clock.
Tuesday,	April	6.—Pathological Society of London. Eight o'Clock.
Wednesday,	April	7.—Geological Society. *Subjects*:—1. J. Prestwich, Esq., jun., "On the Holmfirth Flood." 2. Dr. A. Fleming, "On the Structure of the Salt Range of the Punjaub." 3. Dr. T. L. Bell, "Geological Notes on the Country around Kotah, Deccan." Half past Eight o'Clock.
Saturday,	April	10.—Medical Society of London. *Subject*:—Dr. Radcliffe, "On Epilepsy; its Causes and Treatment." Eight o'Clock.

Medical Times & Gazette.

SATURDAY, APRIL 3.

THE ADMINISTRATION OF CHLOROFORM IN PUBLIC HOSPITALS.

We inserted in our last Number an account of the *post-mortem* examination of the body of the patient who died lately in St. Bartholomew's Hospital from the effects of chloroform, while preparing for an operation to be performed by Mr. Lloyd. There were no morbid changes of any organ to explain the fatal occurrence; the contents of the head, chest, and abdomen were sound: and, but for this accident, the man would in all probability have passed through the usual

term of human existence. The blood, however, appears to have been poisoned. "It was fluid, and it remained without coagulation after its escape from the heart and vessels. It had also a brownish purple hue, much like that which is commonly observed in the spleen; none of it, when thinly spread out, presented the ordinary dark, black, or crimson hue of venous blood."

We trust that this important fact will go forth to the world, namely, that there are persons, in all respects sound and healthy, upon whom chloroform, absorbed in certain quantities into the circulating fluid, acts as a poison, and may cause the rapid extinction of life.

No one could desire, even though this drawback to the use of anæsthetic agents be granted, to see revived the scenes of anguish, and to hear again the shrieks of pain, which blanched the cheek of many a casual visiter to the old operating theatre; but it cannot be otherwise than a most general and earnest wish, that the administration of this important and somewhat dangerous agent should be entrusted in public hospitals, as it is in private practice, to one responsible person. It should be his duty to see that the chloroform is pure, and the instrument for administration in good order; he should keep an account of the quantity used, and the time of its inhalation; his finger should watch the patient's pulse, his eye the patient's face, that due and early notice of the advent of dangerous symptoms might be given to the operating surgeon. No pupil can do this. He is anxious to learn surgery, and to witness the operation; and we feel confident, that in all institutions where the administration of chloroform is entrusted to pupils, sufficient attention is not, and cannot be paid to these points; and it should be remembered, that in most other instances in which death has ensued, it has been under circumstances similar to the present.

We have witnessed the enaction of strange scenes in more quarters than one, and have remarked the anxiety which carelessness upon these points has caused. For example: a patient is laid upon an operating-table; a large piece of folded lint, sufficient to cover nearly the entire face, and soaked in chloroform, is laid upon the mouth and nose; as the lint dries, fresh chloroform is added. The inhalation may go on five, fifteen, or thirty minutes; there may be used one drachm or one ounce of chloroform. It is no one's special duty to note; and that which all may do is done by none. By this primitive, reckless, and unscientific plan, above half the chloroform evaporates, and disagreeably affects everybody in the room; the absorption by the patient goes on so slowly and imperfectly, that in reality the blood becomes much more surcharged than when a proper instrument is used; the opportunity of producing quickly and promptly just the necessary amount of insensibility is lost; and the patient becomes impregnated with the fluid, which for days afterwards is thrown off by the lungs, and eliminated by the secretions. Need we add, that in such cases the operation is often succeeded by many days of sickness and constitutional disturbance.

Great attention should be paid to the quality of the chloroform. Some, very pure, may be given without exciting an unpleasant symptom; another kind produces irritation of the trachea, or incessant sickness and vomiting. Chloroform will not keep long, consequently it should be prepared frequently, and in small quantities.

We are given to understand, that this subject has received attention in the proper quarter, and we doubt not to hear that the evils here expressed and generally known will be rectified.

BITTER BEER.

We were happy to see, in the *Times* of the 30th of March, two letters from Messrs. Bass and Ind, denying in indignant terms the alleged falsification of bitter beer with strychnine. Admitting that M. Payen's statement is true, and we certainly see no reason to class it, with our worthy Contemporary, the *Spectator*, as a fable, we yet never suspected the great brewers of so atrocious a fraud. It is the small dealers, the middlemen, who convert stale ale into fresh beer, and make two bottles out of one, who are the guilty parties, if any be guilty.

It would be a good result if the suspicion of such adulteration caused the public to apply always to the great firms, or to their accredited and responsible agents.

At present, however, the gist of the argument remains unsettled. Is there adulteration or not? Letters from the great brewers do not settle the point. A full investigation is necessary, and Government should enter upon it at once. It is said, that the strychnine is sent to Australia, to poison native dogs. This is very possible, but yet some portion of it may be arrested on the way. At any rate, it would be well to look closely into the matter.

THE COLLEGE OF PHYSICIANS.

It is of the utmost importance that the Profession, and especially the provincial physicians, should be correctly informed respecting the provisions of the proposed new Charter of the College of Physicians. An article appeared in our weekly Contemporary of the 27th ult., stating that, at a recent meeting, the College had determined upon a most exclusive system of admission of licentiates to the Fellowship, namely, that "after the expiration of five years from the date of the Charter, the Council of the said College shall have the power to nominate yearly two members thereof, to be proposed for election as Fellows;" and "thus some twenty or thirty licentiates may expect during the five years from the date of the proposed Charter to be elected to Fellowship." Now, we give the most unqualified contradiction to this statement. The plan really proposed is, to throw open the Fellowship to all licentiates who choose to submit themselves to an especial examination; and, moreover, since many licentiates highly worthy of admission to the senior body may, nevertheless, be unwilling to undergo that examination, it is further determined, that the Council shall annually have the power of proposing for the Fellowship, and without examination, an unlimited number of licentiates, of four or five years' standing, who may be deemed worthy of that distinction.

"*Do fidem, secreta Collegii,*" is the solemn affirmation made upon admission to the Fellowship; and yet among that body we regret to find those who not only forget that promise, but absolutely garble for their own purposes the proceedings that come before them.

While correcting the above error, however, we must express our disapproval of the intention of the College with reference to the institution of an examination for the Fellowship. If carried into effect, the result would be insulting to the licentiates, and injurious to the College. None but juveniles who felt themselves in every sense of the word the inferiors of the Fellows, would submit to the ignominious test —and what a test, after all, would it be! A test of a man's having neglected the practical study of his profession, in order to be *au courant* with the theoretical views of his examiners, and up to the Latin and Greek authors they may favour. No; let admission to the higher grade, if higher

grade there must be, the attainment of which confers no honour, while exclusion from it engenders heartburnings, suspicion, jealousy, discord, and personal animosities,—if such higher grade, we say, there must be, let admission to it be by the unbiassed votes of the Fellows, or, better still, by the votes of all who have passed the College examination, paid the College fees, and kept the College laws.

In proposing the above plan, we believe the College authorities to have been animated by right motives; but, unless right motives lead to wise laws, those legislated for will benefit nothing from the good spirit that animates the legislators.

THE PHARMACY BILL.

Unless some vigorous protest be made, Mr. Bell's Pharmacy Bill will become law. The Select Committee to whom the Bill has been referred are, for the most part, men committed in its favour. The Member for Finsbury is, we presume, no exception; at least, if he carries into Committee the recorded opinions of the Editor of the *Lancet*. Mr. Walpole, it is true, has expressed an opinion adverse to the Bill; but his opposition was not very strenuous, and possibly may not be lasting. In the mean time, Mr. Bell, with characteristic vigour, has succeeded in getting a Petition from that languid coterie in Pall-mall, who only move when they ought to be quiet, and forget how to stir when stirring would be of use.

For our own parts, we once more ask, what has become of the Apothecaries? Is that time-honoured calling and ancient mystery entirely defunct? Are there not still a Hall, and plenty of "lean apothecaries," in the City of London? Are they prepared to join the Pharmaceutical Society, or will they still sustain the old Corporation against the encroachments of its younger brother? Their birthright is now trembling in the balance, and we fear that, like Esau, they will be reft of their patrimony by the seductions of the modern Jacob.

For ourselves, we have expressed our opinions frankly on this matter; and, if our arguments have failed in convincing the Apothecaries that their interests will be seriously compromised, we deeply regret it. That they will themselves repent their inertia, before many years have flown over their heads, we are thoroughly convinced. Even yet, however, it is not too late. Let the Warden and Company of the Apothecaries' Company hold a meeting on the subject, and permit our reporter to be present at it. We shall then know what exact estimate has been formed of Mr. Bell's measure, and whether or not the ancient Pharmacists are convinced that their hour has come, and that they must clear the way without resistance for the modern druggist.

With respect to the College of Physicians, let us ask if the Petition in favour of the Bill was adopted at an open meeting, or in private Committee? Was it unanimous or opposed? Was the influence of the Bill on the other branch of the Profession discussed, or was its effect on the druggists alone considered? We regret extremely that the College has thought it necessary to stir in the matter. Let its members individually hold what opinions they like, the body corporate should not have been committed to a measure which will most certainly have no inconsiderable influence on the Profession at large.

OLD CHAIRS TO SELL!

INQUIRE OF THE COLLEGE OF SURGEONS.

It is impossible for the thoughtful medical man to enter the portico of the College of Surgeons without a more than ordinary sense of the dignity of his profession. The shadow of genius falls upon him as he treads its noble apartments; and as he paces its long galleries, laden with the treasures of a rifled world, he feels with pride that it has been given to one among us, at least, to seize with sagacious mind the clue, which clear thought or happy chance has thrown in his way, and to follow up link after link of that harmonious chain Nature everywhere discovers to her careful observer.

Other museums have arisen by the slow agglomeration of the labours of many, aided by a nation's wealth; this one alone is the stupendous work of one gifted man. How much, then, do we owe to him!—what reverence to his memory! what hero-worship is not pardonable where the hero is so great!

The members of the Council of the College,—the conservators of so much scientific wealth, to whose keeping is entrusted the honour and glory of so great a name,—surely theirs has been the care of preserving to posterity whatever our great master has left pertaining to his labours; theirs, also, has been the sacred and loving office of treasuring with jealous pride whatever personal relics might yet exist of one whose name in the annual oration is kept alive upon their lips like some perpetual fire. The academicians, when they voted a statue to Wilkie, did not neglect to hang the painter's palette at its base; they preserve with care in the painted hall at Greenwich the astrolabe which voyaged with Drake round the world; and with still greater pride the coat in which Nelson died is shown there to the public; and we can imagine what pride would possess the Curator of the College, after having shown some distinguished visiters the labours of the great surgeon, in being able to say,—"In this seat Hunter sat, at this desk he wrote, by this lamp he pursued his labours deep into the night."

Alas! in the very museum which he founded, if the curious visiter searches from garret to basement, he will not find a relic of him left. Did we say from garret to basement? then we must correct our statement. Deep down in the foundations of the buildings, in an apartment inscribed, the "dry-bone room," now used as a kitchen, incredible as it might appear, is to be found all that remains to the College of the personal effects of Hunter. Utterly neglected, and allowed to fall to ruin, are there to be seen the chairs on which he sat. These chairs—of some dark, imperishable wood—are at once *souvenirs* of two of the greatest names of the past century. Cook, the great circumnavigator, collected the wood of which they are made in the South Sea Islands, and Hunter used them for years in his library. Curiously carved and characteristic in form, they might well have been preserved, and yet have done good service, and hundreds would have sat on them with pride for their old master's sake. But will it be believed?—these precious relics are positively being sold, chair by chair, to anybody who chooses to pay a guinea—the price at which, it appears, they are valued by the Council. The best and most perfect, we have been given to understand, have already been seized upon by some of the members of the Council,—the rest, in various states of dilapidation, but all capable of repair, are open to the inspection and biddings of any person who, doubting what we say, might wish to verify statements so disgraceful to the authorities of the College, and so humiliating to every one to whom the name of Hunter is dear.

It might be imagined that the Council, as a body, is not aware of this shameful proceeding. So far, however, from this being the case, the order of sale comes immediately, we believe, from it, and, as we have before said, some of the members have set the example of spoliation—have been the first to attack where they should have been the last to defend what all men but themselves consider to be sacred relics.

No argument of dilapidation can avail these gentlemen, or

soften the disgrace of this act. That which, in a private capacity, they have been so eager to obtain as an ornament of the study, surely could not be a disgrace to an apartment surrounded by the labours of their old possessor. John Hunter's chairs in John Hunter's museum, surely, are more sacred objects than in Mr. Smith's or Mr. Brown's back-parlour! Look at it in any way we will, the disgrace which attaches to the whole transaction seems to us indelible.

Even the servants of the establishment shrug their shoulders at this want of reverence on the part of their superiors; and the attendant who pioneered the way into the dark depths where these chairs are to be found, begged us to remember that no advertisement of the sale had been issued. As that seems the only thing wanting to complete the degradation of the whole affair, we beg to submit to the Council the following, which might be either placed in the *Times*, or posted as a notice in a conspicuous place in the court-yard of the College:—

"The Council of the College of Surgeons of London, considering that the museum collected by the illustrious Hunter is the last place suited for *souvenirs* of that celebrated man, beg to offer, to the public generally, the very curious old chairs which were his companions so long in his library. The members of the Council have had their pick of these relics, but old furniture-dealers will find the remainder a profitable investment,—the Council of the College, in its official capacity, not putting any value upon them. The Council having disgraced itself by its neglect to preserve, has now the meanness to sell them at one guinea each, and no questions asked."

THE ROTHERHAM TRIAL.

A very important trial has taken place in the Rotherham County Court, to which want of space forbids us to refer more fully at present. The Apothecaries' Company prosecuted a Mr. Crowther, a druggist, for practising as an apothecary, that is, for attending and prescribing for patients. The case was clearly proved, chiefly through the exertions of Dr. Shearman, who appears to have acted with great energy. The Judge summed up distinctly against the defendant, and the jury at once returned a verdict for the Company. We gather, that the full penalty of 20*l.* for each offence was inflicted.

FOREIGN CORRESPONDENCE.

FRANCE.

ABOLITION OF CONCOURS.

M. Bonaparte's decree concerning the Professors at the Faculty of Medicine, to which brief allusion was made in a late Number, has been received as "a great blow and heavy discouragement" to medical science in this country. It virtually abolishes the national institution of the *Concours*, and substitutes the caprice or favour of an individual for the test of public competition. We all know, that the pre-eminence of the Parisian School, gloriously sustained for more than a century, was mainly due to the institution of the *Concours*. Without going further back than our own times, we know that it was the *Concours* which gave us Dupuytren as a successor to Pelletier; that we are indebted to the *Concours* for Recamier, Rostan, Roux, Lisfranc, Breschet, Blandin, Rayer, Andral, Bouillaud, Cruveilhier, Marjolin, Cloquet, Orfila, Velpeau, and a host of other illustrious men, *quos enumerare longum est;* and, finally, that the hope of one day arriving at an eminent position, through the force of merit alone, with a clear stage and no favour, had induced all the rising young men of the present day to devote themselves to the career of instruction, which they must now abandon.

The object of the late Presidential decree is generally considered to be entirely political. Henceforward, it is said, all aspirants to professorial honour will have to knock at the iron gate of the Tuileries, instead of gloriously winning their rank in the combat of the *Concours*. It requires little foresight to perceive, that this "untoward" decree, if persevered in, will be a severe blow to the Medical Faculty of Paris. Lisfranc had nearly run through his career before he obtained the Cross of the Legion of Honour, which was recently bestowed on Dr. Higgins. Yet, strange to say, while the *Concours* is abolished for the civil, it is maintained for the military service. A grand school of surgical instruction for army surgeons is to be instituted at the Val de Grace, admission to which can only be obtained by *Concours*.

M. Paul Dubois, as you anticipated, has been appointed Dean of the Medical Faculty, in the place of M. Bernard. It was thought by many that M. Orfila had some chance of recovering the position which he had so long occupied with honour to himself and benefit to the Profession, but Orfila is tainted with the fatal defect—attachment to the Orleans family. I have been thus compelled, *malgré moi*, to touch upon politics. They have proved an unfortunate pastime to many of our *confrères*. Two Polish physicians have been expelled from Montpellier and the territory of France, for meddling in politics. Drs. Maldin, Bienfait, and Hanvot, of Rheims, are in prison for the same offence; M. Chalies, of Tours, M. Loreau, of Boulay, are expelled from France; M. Dubrac and M. Depaix obliged to leave the towns in which they practise, and take up their residence in a distant part of the country, under the eye of the police. They are "internés," as the phrase goes, which we might well translate "interred," for the slightest infraction subjects them to transportation for life to Cayenne or Africa. Dr. Richard, Mayor of Peyruis, M Chassan, and Dr. Allemand, of Forcalquier, in the Lower Alps, have been condemned to transportation to Cayenne; and the same fate awaits many other professional men in the provinces. But enough of this melancholy topic. Let us devote a word to those who are out of harm's way. We have, I regret to say, recently lost M Dezeimeris, the librarian of the Faculty of Medicine. His place cannot easily be filled up. M. Dezeimeris had devoted the best part of his life to the study of the history of medicine, and has left behind him some excellent works on that subject. He is succeeded by M. Raige-Delorme.

DEATH FROM CHLOROFORM.

In the last Number of the *Medical Times and Gazette* you have alluded to an unfortunate case of death from chloroform, which took place in the practice of Mr. Lloyd, at St. Bartholomew's Hospital. From the well-known talent and prudence of Mr. Lloyd, it is impossible not to conclude that every precaution which experience dictates was taken on that occasion. A similar case occurred some time ago at Strasbourg, and was submitted to the most searching investigation before the tribunal of that place. A dentist, named Kobelt, administered a small dose of chloroform to a lady on whom he was about to operate. About four scruples of chloroform were placed on a handkerchief, and held close to the nose for a minute—not longer. This dose proved instantaneously fatal. It was shown in the trial, that the chloroform was perfectly pure, that the dentist, who had previously employed the same means in more than 600 cases, was well acquainted with the mode of administering it, and had not acted in any rash or imprudent manner. Traces of chloroform were found in the lungs, spleen, and blood. After a most careful investigation of all the circumstances, M. Kobelt was acquitted. This, and many other cases which might be cited, sufficiently show that the problem of the administration of chloroform is not yet completely solved. Fatal cases occur every now and then, which can neither be explained by any impurity of the remedy, or any neglect of the rules established for its administration. Why should the same dose of the same remedy, administered in the same manner, and under similar circumstances, produce only slight anæsthesia in one case, while it proves suddenly fatal in another? In the present state of our knowledge, we can only answer this question by a reference to individual susceptibility, and, instead of vainly disputing on this or that cause, medical men should direct their attention to the circumstances under which this unfortunate susceptibility is developed. It exists for opium, and, in a most remarkable degree, for the cannabis Indica.

BERRIES OF THE MOUNTAIN ASH.

M. Pelouze has just read, at the Paris Academy of Sciences, a long and interesting account of his discovery of a new saccharine substance in the berries of the mountain ash (*Sorbus*), and which he proposes to designate by the name of Sorbine. He obtained it in the form of beautiful and regular transparent crystals. Sorbine bears a great analogy to ordinary cane-sugar, but, unlike the latter, it is not susceptible of vinous fermentation, even on the addition of yeast. M Pelouze is of opinion that this newly-discovered saccharine matter exists in other fruits, and considers it very pro-

bable that the sweet taste which still remains in liquids which have undergone the vinous fermentation is due to the presence of sorbine, and not, as has heretofore been considered, to their containing an excess of sugar over the fermenting principle.

M. Pelouze has also obtained sorbinic acid, and with it formed a series of salts termed sorbinates.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

ROYAL MEDICAL SOCIETY.

The extraordinary meeting of this Society, referred to in a former letter, was held on the 8th instant, when a very large number of members were present. After a discussion of some length, it was determined, by an overwhelming majority, to empower the Committee to purchase the building No. 7, Melbourne-place, as the new Hall. That this choice of the Committee and of the Society will prove a judicious one we have little doubt. The building is a new and handsome one, situated in a most excellent position, and requiring comparatively little to be expended upon it before being fitted for the accommodation of the Society and its most valuable library. It is anticipated that the Society will meet for the first time in its new hall on the commencement of next session.

NEW PHARMACY BILL.

The proposed legislation for the benefit of the chemists excites no small attention. Little difference of opinion exists as to the advantages, if not the necessity, of such a procedure; but there are few who do not already detect the demerits of the proposed Bill. The Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, the rights of both of which are threatened, have petitioned against it. What is required to be gained for the chemists by legislative enactment, and what they have no right to expect and must not be granted to them, was clearly pointed out in an Editorial Article in the *Medical Times and Gazette* for March 6th. Besides appearing to us to affect the interests of the licensing bodies as now constituted, Mr. Bell's Bill, moreover, threatens to impede the course of the much required medical reform. We object to the institution of any more corporations, and we cannot see the propriety of inflicting upon the public such an one as is proposed. All that is wanted for the important class whose interests Mr. Bell has espoused, may be gained without sacrificing or even endangering existing institutions, and without erecting the formal and formidable machinery of another corporation.

We have a further and decided fault to find, in the indecent hurry with which Mr. Bell has brought forward and attempted to carry through his Bill; hardly the opportunity of objecting has been afforded before the second reading.

OLD HOUSES IN EDINBURGH AS THEY ARE AND OUGHT TO BE.

Dr. Robert Foulis, a Fellow of the College of Surgeons, and one of the medical officers of the new Town Dispensary—a gentleman uniting the highest philanthropy with the most untiring perseverance, has recently shown what can be done in this way. Acquiring as his property one of the most dismal and abandoned closes of the Grassmarket (and therefore of the whole city), he has, by little more than his unaided efforts, converted it into what must now rank, without exception, in point of cleanliness and the other virtues, as the foremost. There are few Edinburgh students of medicine who have not in their day been made familiar with Burt's-close, and with its wretched and awkward neighbour, the Hatters'-land, more fever and more cholera, as Dr. Foulis truly remarks, having been taken to the Infirmary from that locality than from any other of an equal size—he might have said, of twice its size. Fixing on this, perhaps the most wretched close in Edinburgh, Dr. Foulis has effected a reform, the possibility of which, before the commencement of his undertaking, might easily have been doubted. He has transformed it completely, and, determined to leave no trace of its former wretchedness, he has (here of course aided by the police) effected the change of its name to that of Warden, whereby it was originally known some thirty years ago. There are four features which characterise the improvements Dr. Foulis has brought about. They are the following:—1. The erection of superior houses for the working classes in the heart of the town, with water, gas, water-closet, and bleeching-green, constructed out of old property, and at moderate rents, amply remunerative at the same time to the proprietor. 2. A grocer's shop where no spirits are sold. 3. A commodious coffee-house (coffee palace) and reading-room for the benefit of the working classes. 4. A model lodging-house, where mechanics can obtain most comfortable accommodation at the same rates as those charged for the worst. We have ourselves visited this model close, and had our attention drawn to the features now enumerated. The night preceding our visit, three-fourths and upwards of the beds in the lodging-house had been occupied; and that morning sixty-seven mechanics or members of their families had breakfasted in the coffee-room. As an experiment, this model-close of Dr. Foulis is triumphant, and its success, we are sanguine enough to hope, will not long be singular. Under the title of "Old Houses in Edinburgh," etc., Dr. Foulis has published a most interesting pamphlet, (a copy of which we send,) and a perusal of which we confidently recommend as most refreshing to all who are interested (and who is not?) in the sanitary as well as moral alleviation of the poorer classes of our large cities and towns.

GENERAL CORRESPONDENCE.

ON THE ADMINISTRATION OF CHLOROFORM IN THE PUBLIC HOSPITALS.

[To the Editor of the Medical Times and Gazette.]

Sir,—However trivial a matter the exhibition of chloroform may have been considered by many on its first introduction, I believe there is no one who does not now look on it as a subject requiring the utmost care and attention, together with a thorough knowledge of all the symptoms it may induce. The possible consequences of want of attention or skill are so serious, that the office of administering chloroform should no more be delegated to a dresser than the important operations of surgery, or even to a house-surgeon, where he holds the office for a limited period. While fully acknowledging the great attainments of the gentlemen who usually occupy the office of dresser or house-surgeon in the London hospitals, I consider that there are grave objections to their having charge of the chloroform. As these offices are frequently changed, the duty has to devolve, every now and then, on an individual who is quite a stranger to it in practice, and, as he is anxious to learn surgery, it often happens, that, as soon as the operation is about to begin, his eyes are directed to the proceedings of the operator, and no one is looking to the effects of the chloroform.

No person ought to administer chloroform without first making its action a subject of special attention; and, as there requires to be some one always on the spot to administer it on emergency in the public hospitals, it should be the duty of a permanent resident medical officer. This plan has been found to answer perfectly where it has been acted on. At St. George's Hospital, for instance, Mr. Potter was appointed to the duty of giving the chloroform, between two and three years ago; and I believe there has been no alarm or uneasiness respecting it in any case. In University College Hospital, Mr. Clover has, I believe, performed this duty since the early part of 1848, with an equally satisfactory result. In St. Bartholomew's Hospital, the chloroform was long administered by Mr. Tracy, and all went on well; but since it has been entrusted to the dressers, two accidents have happened—one a fortnight ago, which was fatal; and one a few months ago, in a case of Mr. Stanley's, which had well nigh ended fatally. Where accidents have happened in hospital practice, there has been no person regularly deputed to manage, or even to superintend, the inhalation; and, notwithstanding what has been said of the experience of the gentleman who administered it in the late fatal case at St. Bartholomew's, it appears that, when questioned at the inquest, he was unable to state what are the signs indicating danger during the administration of chloroform. The fact of deaths not occurring in the hands of persons who have given great time and attention to the subject, cannot be attributed to mere coincidence, for, when chloroform is administered by a uniform method which insures the sufficient dilution of the vapour with air, the results are so regular and so completely under control, as to afford proof that danger can be altogether avoided by care and skill.

I have heard it said that, although the person giving the chloroform may be inexperienced, yet there are able practitioners looking on; but the action of this agent, when not well managed, may be so rapid that there is not time to give directions, and it is necessary, therefore, that the thought and the action should be combined in the same person. Moreover, if supervision were sufficient, it would still be requisite to appoint a superintendent, for "what is everybody's duty is nobody's duty," and the attention of every one is generally absorbed by the surgical operation, if the chloroform

is not under the management of some competent and responsible person.

The best defence that can be made for entrusting the exhibition of chloroform to the advanced pupils of an hospital is, that they thereby gain practical experience in it previous to having to apply it in their own practice. But if it be thought necessary that they should have this practical experience, let them begin first (as indeed every one ought to begin) by using sulphuric ether; using it, however, under the guidance of a responsible superintendent, such as I have mentioned; and when they have become well acquainted with the various stages and degrees of narcotism, and can manage the ether properly, it will be time enough to try the more potent agent.

It is often said that chloroform should not be employed in minor operations; but, if it can be employed without incurring any danger, there is no reason thus to limit its use; and, unless a person feel confident that he can employ it without running the least risk, he ought not to use it in any case. For the truth is, there is never any greater reason for giving it than that of avoiding the slight pungency, strong odour, and other little inconveniences of sulphuric ether. It is much to be regretted, in my opinion, that chloroform was introduced before the greater number of the Profession had had time to become fully convinced of the great merits of the last-named agent, which, when properly applied, produces all the advantages of chloroform, and is at the same time as safe as a medical man could desire; for, if any agent safer than sulphuric ether should be introduced, patients and nurses would apply it, and it might degenerate into a domestic remedy, and be abused.

I shall not enter on the manner of giving chloroform, or the rules to be observed in its use, as I have treated of these points on other occasions.(a) I am, &c.

18, Sackville-street. JOHN SNOW, M.D.

[To the Editor of the Medical Times and Gazette.]

SIR,—The report of the death from chloroform, in your last Number, induces me to trouble you with a few observations, the result of my own experience, upon the subject, in the hope that others may be induced to follow my example, in order that, if possible, some positive conclusion may be arrived at for our guidance in the use of this valuable agent. I have generally found, that where there has been much struggling during the administration of chloroform, a much greater quantity has been required to produce a given effect than under ordinary circumstances, and latterly I have preferred, in such cases, to proceed with the operation, if after an ounce has been respired the patient has not become insensible. I prefer the use of a small cupped sponge to the apparatus in general use; first, on account of its simplicity, but chiefly because the actual quantity of chloroform respired can be much more readily and certainly ascertained. The sponge having been dipped in warm water and pressed, a teaspoonful of chloroform is sprinkled over it from time to time until the full effect is produced, the sponge being applied over the open mouth and nostrils of the patient. I seldom find it necessary to exceed an ounce, and far more frequently from two to four drachms suffice to produce complete insensibility. A case in point occurred on Friday, the 19th March, when I had occasion, assisted by Messrs. Hunt and Mellor, to remove a portion of the foot in consequence of necrosis of the phalanges and metatarsal bone of the great toe, the result of injury. The patient was 60 years of age, somewhat emaciated, and had not slept soundly for the last thirty weeks. At his urgent request, chloroform was administered, but an ounce having been respired without the full effect being produced, and the patient struggling much, it was considered advisable to discontinue the use of the chloroform, and to commence the operation without waiting until the patient became insensible; for, although complete insensibility had not been produced, that extreme paleness of the face had taken place which, as indicative of internal congestion, shows that the use of the chloroform cannot be persevered with without danger to life. The history and result of the case at St. Bartholomew's seems to prove that we acted wisely in so doing. I am, &c.

Rusholm, Manchester. ALFRED CARR, M.D.

P.S It is to be desired, that the actual quantity of chloroform introduced into the apparatus in Mr. Lloyd's case should be made known.

(a) *Medical Gazette*, 1848, Vol. II., pp. 333, 412, 615, 840, et seq.; also *Medical Times*, 1850, Vol. II., p. 228; and present Vol., p. 253.

RETRACTION OR DEPRESSION OF THE NIPPLE OF THE BREAST IN WOMEN.

[To the Editor of the Medical Times and Gazette.]

SIR,—On the perusal of Birkett's excellent work on "Diseases of the Mammary Gland," I was disappointed to find he did not lay down any mode of remedying this painfully distressing state of the breasts in women about to become mothers, so painfully annoying to them, and not unfrequently of serious consequence to the infant.

Birkett says, "this is a state of the organ which engenders so much distress in nursing, that too much attention cannot be given to remedy, if possible, such a condition of parts. With this view, some attempts should be made during the latter months of pregnancy to effect so desirable a change, usually neglected till the period of parturition; it then becomes a great source of anxiety and difficulty, for the highly distended state of the gland renders every attempt to such abortive. The medical attendant should make inquiries concerning the condition of the nipples when first called to *prima parœ*, and give proper directions if they appear imperfectly developed.

"All pressure on the part should be carefully avoided, and the evolution of the nipple may be assisted by using an apparatus made expressly for the purpose. An older child may likewise be put to suck the breast, if the infant of the patient is not sufficiently strong, and the subject has been neglected till after childbirth."

Another author says: "Some women are so unfortunately organised as to want the nipple altogether, or to have it very short, or sunken in, or inverted; such may have been the inconveniences necessarily attached to this malformation, remedied or improved by the application of a young, but sufficiently strong puppy to the breasts; this should be begun immediately after the seventh month of pregnancy. By this plan the nipples become familiar to the drawing of the breasts, the skin becomes hardened and confirmed, the milk is more easily and readily formed, and a destructive accumulation and inflammation is prevented."—*Der. es*, p. 84.

Again: "If the nipple be very flat, and cannot by suction be drawn out, so that the child cannot get hold of it, the woman cannot nurse. A glass-pipe frequently applied will sometimes remedy this defect; burns, or a tobacco-pipe, or heated bottle, or Florence-oil flask, a stronger child, a breast pump, or exhausting syringe. All these appliances may be useful in the minor cases, where the nipple is fully developed, but does not readily yield the milk. The application of a puppy or exhausting syringe to the breast in the beginning of the eighth month of pregnancy, appears to me highly objectionable, as likely to produce premature labour, or disturb the uterine functions; these applications should only be used when a patient has arrived at the full period of utero-gestation, or immediately after parturition, and before the breasts become much distended." These directions, to say the best of them, are very vaguely given. I have, therefore, put down the mode of management, which I have found to fulfil the indication to produce the emergence of the nipple, limiting my observations to a patient with an averagely developed breast, but without a nipple, or in the retracted, depressed, inverted, or undeveloped nipple.

This state is to be remedied by the application of an ivory shield without a top, attached to the breast by mucilage of gum or white of an egg, or, what is preferable to the shield is the application of thick defensive plaster, half an inch thick, three inches in diameter, having an aperture in the centre of about an inch, or adapted to the size of what the nipple ought to be, the aperture to be placed over the retracted nipple. The breast should be loosely covered, and washed with cold water or salt and water twice a day; by these means the nipple is disposed gradually to emerge, and the breast is kept in a healthy state. The adhesive plaster has the advantage, as it may be kept constantly applied, whereas the ivory shield is very apt to fall off, by which the object we have in view is defeated. When the patient is confined, a breast-pipe, or pump, may be used for a day or two; but a woman accustomed to draw the breast is infinitely better than either.

I will subjoin the case of a patient who called on me, a short time since, at the time I was reading Mr. Birkett's work.

Mrs. G. consulted me, in January, 1847, on account of her pregnancy and the state of her breasts. She had had three children, neither of which she had been enabled to suckle on account, as she said, of having no nipple, and she had suffered a good deal in consequence. Mrs. G. was in average health, had well-developed breasts, but literally no apparent nipple. A portion of thick adhesive plaster, with a hole in the centre, was applied, which she obtained at Ewen's, Jermyn-street, St. James's.

A plaster was kept on, without intermission, till the period of her labour in April. After she was delivered, her breasts were drawn by a breast-drawer the two following days, twice a day, and,

without any further trouble she was enabled to suckle her child (a fine healthy girl) for upwards of nine months.

I may mention another, a more recent case, where in one breast only the nipple was deficient, from which breast the patient was unable to suckle her child, and had mammary abscess in consequence of the fruitless attempts to do so. She has since, in her subsequent pregnancy, applied the thick defensive plaster with the best effect. I am, &c. HENRY DAVIES, M.D.

6, Duchess-street, Portland-place.

THE STATISTICS OF MORTALITY IN PUBLIC INSTITUTIONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Dr. Parkes appears to have misapprehended the source from which I derived my statistics as given in the letter which appeared in your Journal for March 20. He says, that I stated "only partially, and therefore incorrectly, the mortality in the London Hospitals." In reply, I beg to say, that I stated impartially, and therefore correctly, those statistics, as given by the Registrar-General. The fact is, the authorities at Somerset-house have issued a broadsheet, entitled "Summary of the London Returns of Mortality," in which is given a table of the number of inmates in public Institutions during 1851, the number of deaths, and the annual mortality per cent. of the average number of inmates. These are the entire particulars, as they appear in the Table. There is no "average term of residence," no "total of cases discharged (cured or otherwise)," and no "deaths to 100 cases;" and the form of heading to one column, which Dr. Parkes correctly quotes from the weekly return which was extracted in the *Medical Times and Gazette* as follows: "Deaths to one hundred beds assumed to be occupied continually," is as follows in the Table which I quoted:—"Annual Mortality per cent. of Average Number of Inmates." With the object of the Registrar-General in putting forth such a vague statement, with all the prestige of a broadsheet, I have nothing to do. I stated the case as it stood, and invited the authorities to meet the legitimate effect of such a statement. Of course, I did not believe any such nonsense as that King's College Hospital killed every patient they had one and a quarter times, that University College performed the same feat one and a half times, or that every patient in the Small-pox Hospital died more than twice; yet such would have been a legitimate deduction from the Table which I quoted, and which I thought it worth while to observe upon, if only to show the effect of it to those whom it concerned. In conclusion, I trust that statistics may be properly *given*, and then, with Dr. Parkes, that they "will be properly used." I am, &c.

B. SMITH.

"LOOK AT HOME."

[To the Editor of the Medical Times and Gazette.]

SIR,—Every honourable medical man in the British dominions will thank you for your moral courage in broaching the subject of quackery within the pale of the Profession. I hope you will return to it, and fearlessly expose those paltry tricks, contrivances, and hypocrisies, too often resorted to in every grade of the Profession to get into and extend practice.

There are many phases of this quackery, to some of which you have alluded; but that which assumes and abuses the appearance and sanctity of religion is of all others the most disgusting and reprehensible.

This, however, is the surest tack for making a practice, especially in provincial cities and towns, and even in those watering-places of fashionable resort, where, to be genteel, the doctor must be very religious, and worship the parsons.

No man respects religion more than I do; and I do so without distinction of church or sect, holding it to be the sacred right of every one to worship God in the way he thinks safest for his own soul.

I respect the truly religious man; but, without presuming to judge any one, I mistrust and abhor a Pharisaical display of godliness.

This humbug is not peculiar to any church or sect; it is common to them all, and rides roughshod over the most undoubted talent, even when united with the most sincere and unobtrusive piety.

Notwithstanding all this, medicine is not second to any other profession or class of men in honour, philanthropy, and charity. It is of all other professions or pursuits the most liberal and disinterested. No men do so much for the poor and needy without prospect or hope of reward, and at so great a sacrifice of time and labour as medical men do. Among themselves there is a reciprocity of good feelings and good offices scarcely known in other professions; and there is, also, among them an instinctive desire to encourage talent and merit, and to uphold and perpetuate the dignity and usefulness of the healing art, with which view, Sir, I am sure it was, that you called upon us to "Look at Home;" and it is in the same spirit that this is, with great deference, addressed to you by an old invalided M.D.

London.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

JOHN BISHOP, ESQ., F.R.S., F.R.C.S. Eng., President, in the chair.

Votes of thanks to the officers of the Society during the past session were proposed, and carried unanimously. Dr. Murphy, the retiring President, briefly acknowledged the vote given to him for his services as President.

The new President having delivered an address on the objects and prospects of the Society,

Dr. Handfield Jones read a communication

ON THE MORBID CONDITIONS OF THE KIDNEY GIVING RISE TO ALBUMINURIA,

of which the following is an abstract:—The author commences by referring to the fact noticed and dwelt upon by Mr. Bowman and others, that in consequence of the peculiar arrangement of the vascular system of the kidney a more than ordinary pressure is exerted upon the capillaries of the Malpighian tufts, which at the same time being unsupported by fibre or solid tissue, are therefore peculiarly liable to rupture and hæmorrhagic effusion. These peculiarities will of course tell with increased effect if the organ become actively congested. Three well-marked conditions of the kidney are noticed as existing with albuminuria. The first is the condition of engorgement, such as is seen in those who die in the early stage of acute anasarca, or in that of dropsy succeeding scarlatina. The organ is enlarged, dripping with blood in every part, its tissue not destroyed, but many of the tubes are seen under the microscope to contain coagula of exuded fibrin, entangling blood globules and more or less of epithelium. Under timely and appropriate treatment, the author believes that complete recovery from this affection may take place, and the kidney be restored to its original healthy state. He grounds this opinion partly on the result of an examination, partly on the testimony of general experience with respect to the recoveries which take place in scarlatinal dropsy. The second form of diseased renal structure described is, that of the large, heavy, often mottled, and pale kidney. In this there is no hyperhæmia, or rather the reverse state usually exists. The cut surface has not the appearance of healthy structure, and gives one the idea of some matter having been infiltrated among the natural constituents, so as to obscure them and to produce a confused aspect. The tubes are found infarcted with epithelial matter, but not by any means constantly obstructed or blocked up, although they are irregularly dilated. In some parts, though this is not the case in all instances, oily matter is deposited, and makes the tubes where it exists quite opaque. The evidence is, however, as clear as possible, that the morbid process is not of the nature of fatty degeneration. The Malpighian tufts are often obscured by effused matter, and the medullary tubes more or less filled up with oily and granulous matter washed down into them. The author believes that this state of disease may arise, either as a primary degeneration without any preceding engorgement and hyperhæmia, or that it may be the sequel of the first described condition. The third variety of morbid change is that so familiar to observation as the dwindled granular kidney. The organ is generally somewhat congested, the cortical secreting tissue remarkably atrophied, the capsule adherent to the surface, which presents the well-known granulations. In advanced cases there is found extreme destruction of the tubes of the cortical substance; their basement membrane is gone, their epithelium scattered about as mere *débris*, and their place occupied in many cases by an abundant cyst-formation. The medullary tubes are filled up very often with more or less of granulous and oily matter. The Malpighian tufts are sometimes compressed, sometimes obscured by films of exuded matter; sometimes they seem tolerably healthy. There is no very decided evidence of the formation of new fibrous tissue, as in cirrhosis of the liver, but the matrix often seems to

have lost somewhat of its natural homogeneous aspect, and to be infiltrated with a granulous stuff. The author coincides entirely with Mr. Simon's account of the origin of the cysts which are so numerously developed in many cases of granular kidney. He thinks the two following arguments conclusive as to the question whether they are formed solely from an alteration of the tubes, or as a secondary development out of their *debris:* (1) That as Mr. Simon observed, they have a diameter sometimes less even than that of the tubes themselves; (2) that they are not formed in nearly all the instances of kidney which have apparently undergone precisely similar destructive change of their tubular structure. He believes, however, that cysts are also formed by dilatation of the tubes, and perhaps of the Malpighian capsules. The author adopts Dr. Prout's view, that the nature of the morbid change in the two latter forms of renal disease is not such as can with any propriety be considered an inflammation, sub-acute or chronic; he coincides entirely in the original idea of this celebrated physician, that the disease is truly a degeneration, a spoiling and impairment of the whole organ, occurring quite independently of inflammation, but on which inflammation or congestion may very easily, and does very commonly, at various times, supervene. This opinion seems to be strongly supported by the acknowledged causes of the disease, which are all of a debilitating nature, exhausting the organic life and vigour of the system. It is further contended, that the mere exudation of coagulable material into the tubes is insufficient to account for the atrophic change, since it might continue to be washed out by the urine, and, in fact, the disease goes on when the fibrinous moulds are no longer found in the urine, which does not depend on their being retained in the organ, but on their being no longer formed in consequence of hyperhæmia having subsided. In the treatment of acute anasarca, from whatever cause, cupping on the loins, venesection, if the strength allow, and tartar emetic, are pointed out as the means on which reliance may be placed. The action of the skin is to be promoted, and saline and other diuretics foreborne until the latter stage of the disease, when, the author believes, they may be employed with benefit. He compares their use at such times to that of squills or the balsams in the latter stages of bronchitis. In the chronic forms of disease constituting morbus Brightii, the author remarks, that the degenerative nature of the affection should never be lost sight of, and that our chief endeavour should be, as long as any hope remains, to uphold, strengthen, and improve the constitution by every tonic and corroborant means in our power. It is suggested, also, whether in consequence of the ascertained condition of the renal organs, their tubes containing unnatural, dense, accumulated epithelial matter, and the Malpighian tufts being also often overlaid by effused fibrin, it might not be of advantage to administer the alkalies, and especially the liquor potassæ, somewhat in the same way as was done by Mr. Brandish, in the hope of inducing a healthier condition of the epithelial lining of the tubes. This seems the more reasonable, from the known influence of alkalies upon albuminous matters, and the experience we have of their deobstruent powers.

Dr. Theophilus Thompson wished to notice one of the various points alluded to in the paper; the hopeful character of the remarks as to the treatment of the disease. The author had alluded to the resemblance in the condition of the kidneys after scarlet fever and that which is met with in Bright's disease, and this in such a way as not to deprive us of hope of relief even in cases where the latter disease is fully established. His own (Dr. T. Thompson's) experience was somewhat in favour of this theory. He (Dr. T. Thompson) was desirous to ascertain the experience of the members as to the efficacy of issues in the loins in such cases of disease. Some ten years ago he had had a case in which he had tested their utility. He saw a lady, not quite fifty years of age, who had not passed any urine for two days, presenting also other signs of renal affection. The usual course of treatment was adopted, cupping on the loins, warm-baths, the application of blisters, the vesicated surface being afterwards dressed with veratria, etc.; but no beneficial effect was produced. The third day passed, but no urine was excreted; indeed, during the previous five days, only two or three drachms of urine had been passed, and not one drop from the third day. The question arose, what was the cause of this? She was reported to have had an attack of illness, followed or accompanied by an eruption called anomalous, but which was considered by a talented medical man to be, at least, allied to scarlatina, or in some way like it. The patient also had had an issue in her loins for two or three years previously for the relief of alleged spinal irritation, but which had been allowed to heal of late. As its closure might have some connexion with the suppression of urine, it was determined to re-open it, and he (Dr. Thompson) could not help considering its re-establishment the cause of the very marked improvement that soon followed. The patient resided in the country, and the urine was sent up to him in town, and submitted to Dr. Lees for examination. The first quantity passed was in drachms; it then increased to ounces; but months elapsed before the normal quantity of discharge was renewed. The specific gravity of the fluid, when it was first re-secreted, was 1005; this gradually rose, the albumen in it became less and less obvious, and it finally disappeared altogether. The result in this case led him to the belief that the issue had done good, and he therefore tried it in another case—that of a little girl—of renal disease after scarlet fever; and in that case also recovery followed its use. Connected with the author's remarks on the similitude of the renal disease after scarlatina and Bright's disease of the kidney, he might mention the case of a young man, 20 years old, who was the subject of well-marked Bright's disease, and in whom an issue in the loins was made, the tincture of the sesqui-chloride of iron being given internally at the same time. In that case the most marked benefit resulted from the treatment; but he had lost sight of the man after the lapse of three years; he heard subsequently that he died nine years afterwards. He had generally found, that, after the slough from the issue had separated, the urine contained some blood, which usually seemed to prelude the beneficial change. The formation of the issue relieved the kidney, and the iron exhibited internally, as he had already mentioned, improved the deteriorated state of the blood. In some bad cases, he had found astringents—such as large doses of gallic acid—of great value, and he would wish to ask the members in what way astringents could be serviceable? Cupping and issues on the loins, with iron internally, and in some cases astringents, would constitute the line of treatment he should be inclined to recommend.

Mr. Chippendale referred to the statement by Dr. H. Jones, that alcohol coagulates the epithelium of the tubes, and said, that he differed in opinion with him on that point. Dr Jones had lost sight of the fact, that these are the great producers of urine; by their bursting and death it is set free. In the commencement of his paper, Dr. Jones said, that fluids are changed in their passage through an animal membrane, but it is not so unless there be epithelial cells on the other side, or these cells be stimulated to great activity by alcoholic drinks. He (Mr. Chippendale) thought that the urine was secreted from the venous, not from the arterial blood. The Malpighian tufts being for the purpose of driving the blood through a great extent of surface, act as a sort of portal circulation in the kidney, and, indeed, in some of the Batrachian reptiles a true portal system is found in the kidney. These tufts being for the purpose of venalising the blood, there is no good reason therefore for their being inside the uriniferous tubes, as stated by Dr. Handfield Jones, but very good reasons for their being on its exterior.

Dr. Handfield Jones in reply remarked, that Dr. Theophilus Thompson had mistaken his views as to the state of the kidney after scarlatina and in Bright's disease. He certainly had not stated them in full, but he regarded the diseases as essentially distinct, the first being a case of acute engorgement, and the other of degeneration of tissue. The treatment consequently must be very different. Issues in the loins, he thought, might be serviceable, but he should prefer cupping; gallic acid may be of use, but it is not likely to cure or to arrest the degenerative change going on in advanced cases of Bright's disease. He had explained views and stated facts as to the deleterious action of alcohol on the kidney, to which Mr. Chippendale seemed opposed, and he illustrated them by its causing cirrhosis of the liver and Bright's disease of the kidney. He felt certain that the uriniferous tubule expands and encloses the Malpighian tuft; he had seen and demonstrated the fact, but on only one occasion. The German anatomists are unanimous on that point.

NEWCASTLE PATHOLOGICAL SOCIETY.

CASE OF POPLITEAL ANEURISM CURED BY COMPRESSION.

By T. STEPHENS, Esq.

William Pott, a fisherman, aged 50, came under my care in September last with a popliteal aneurism. The tumour at that time was the size of a pullet's egg cut in two, felt hard to the touch, and pulsated strongly, which pulsation was easily stopped by pressure on the femoral artery. He being unwilling to undergo an operation, I determined to make a trial of compression. Two pads were fixed on the femoral artery by means of elastic ring tourniquets, but not so tight as to completely control the pulsation in the tumour. On the following day the upper one was slackened, and the two were afterwards alternately tightened and loosened, for about twelve hours at a time. In about seven days the foot and ankle became

so tender and painful, that he begged of me to take the apparatus off. I, however, continued it with a diminished pressure. On the eighth day the pulsation had diminished, but not ceased. On the ninth day I took off the apparatus, and re-applied it on the tenth. On the eleventh it had somewhat increased; on the twelfth it was scarcely perceptible, and, on the fifteenth, no pulsation was to be felt. The leg and foot became extremely cold and pale, but the heat was gradually restored by means of friction and flannel bandages. On visiting him about three weeks after, I found the tumour nearly gone, and he has now resumed his employment.

CANCER OF THE STOMACH ENCROACHING ON THE LOWER PORTION OF THE ŒSOPHAGUS.—BRIGHT'S DISEASE.

By Dr. CARGILL.

The subject of the present communication was a sawyer, named James Fairbairn, aged 65, residing in Gateshead, of the bilious-nervous temperament, and who dated his disease from six months previously. He was cachectic-looking, and much emaciated. The commencement of the complaint was marked by diarrhœa; but latterly he has been much confined in his bowels, and can take scarcely any article of diet. The abdomen was generally distended, and in the upper portion it sounded dull on percussion. The liver was not of greater volume than natural, and there was no uneasiness on pressure in that region. At the same time, there was no circumscribed tumour appreciable to the touch over the region of the stomach. There was occasional pain over the epigastrium, which, however, was inconstant, and troubled him very little. He never experienced pain in the back. He suffered a good deal from flatulent distension of the stomach; but the chief symptom which led me to diagnosticate scirrhus of the cardia was, that if he took any quantity of food fast, it was immediately rejected by vomiting; and if he took any but a small quantity of food at a time, it was speedily rejected, whether taken slowly or fast. Moreover, there was a good deal of inconvenience felt in the act of deglutition, and this had to be performed with care and management sometimes before it could be effected. Vomiting was accompanied in him more or less with a sense of suffocation. From these latter circumstances, I was induced to conclude that the lower portion of the œsophagus shared in the disease, and was strictured by it. Shortly after his admission the feet and ankles showed a little œdema. The treatment was very simple, consisting of mild purgatives, which had the effect of greatly relieving the distension of the abdomen, and preventing flatulence and pain. The only other agent used was a quarter of a grain of the oxide of silver, with one grain of extract of hop, thrice daily. Under this treatment he always expressed himself as much better, and he was ordered to have very little aliment given at a time, and that to be of sago and arrowroot, a little tea and bread and butter, and a tablespoonful of brandy in water twice a day. Until the day before his death he enjoyed comparative immunity from suffering, but he then became rather suddenly prostrated and died, no stimulants or other measures having been attended with any good effect.

Post-mortem Examination Eighteen Hours after Death.—Legs and ankles œdematous. Lungs healthy. A few calcareous deposits at their apices. Heart healthy, but looked rough externally, as if lymph had been at one time deposited on it, although there was no pericardial adhesion. Stomach extensively diseased; a large scirrhous mass existed, occupying nearly the whole of its lesser curvature from the cardiac to the pyloric extremity. The cardiac was the portion chiefly involved, and the œsophagus was encroached upon for a couple of inches before its junction with the stomach. Its calibre was diminished to the size of a writing quill here, and this seemed in a great measure due to the great hypertrophy of its muscular coat. The stomach contained a good deal of dark grumous fluid, resembling coffee grounds. A few hardened glands, evidently affected with scirrhus, existed in the folds of the omentum. Liver dark and congested, otherwise healthy. Kidneys granular; first stage of Bright's disease. The delineation in wax of the stomach in this interesting case, which I had executed by Mr. Dinsdale, of this town, and which I now exhibit to you, does the artist great credit, and represents as accurately as possible the precise morbid appearances discovered at the autopsia.

CASE OF FEMORAL HERNIA.

By J. S. GREEN, Esq.

The author begged to call the attention of the Society to the following case, not so much from its striking peculiarities, as to show that an important and dangerous operation might be performed on an emergency with very few instruments:—Being at Bemwell Fishery, on Friday, 18th October, I was requested by Mr. Storey to see Mrs. ——, aged 32, labouring under strangulated hernia. On examination, I found a tumour in the right groin, about the size of a large egg, presenting all the characteristics of strangulated femoral hernia, namely,—incessant vomiting, constipated bowels, great prostration, cold skin, small, frequent pulse, and hiccough, with much pain and tenderness over the abdomen, more especially in the epigastrium. She stated that the swelling had repeatedly shown itself, but she had always been able to "put it up" before the present occasion. After slightly and gently trying the taxis without effect, I at once urged an operation for her relief. She immediately consented, and I proceeded to perform it (sanctioned by Mr. Gibb, who also casually saw the patient) with literally nothing but a small bistoury which Mr. Storey had in his pocket, and a flat piece of whalebone Mr. Gibb picked up in the room for a director. With a firm and cool determination to cut carefully, and cut nothing but what I clearly saw, save the stricture itself, I ventured upon my task thus inadequately prepared, and am happy to say succeeded in my object, and doubtless saved the life of my patient, a poor widow with two children. The difficulty and danger were vastly increased by having to divide the constriction on the apex of my left fore-finger by a sharp-pointed bistoury. Knowing that so much depends upon the after treatment in operations for hernia, and the risk of giving purgatives soon afterwards, I deemed it most prudent to try to suspend for the present the peristaltic action of the intestines, by giving directly two grains of solid opium, with a request that the dose should be repeated in five or six hours. The case progressed favourably. On the following Sunday, however, there was a slight attack of peritonitis, which was subdued by free leeching, etc. The bowels were subsequently acted upon by enemata, and the woman is now quite well.

LIVERPOOL MEDICAL AND PATHOLOGICAL SOCIETY.

THREE CASES OF ASPHYXIA FROM THE INHALATION OF IMPURE AIR.

By J. D. WEAVER, Esq.

Neil M'Cormick, aged 21 years, Silas Skinner, aged 18 years, and William Cochrane, aged 17 years, a portion of the crew of a schooner lying in the Waterloo Dock, retired to their berths before 12 o'clock at night perfectly sober. The cabin was 7 feet long, 10 feet wide, and 5 feet in height. The fire had been extinguished about five o'clock, and the flue, which was of a temporary nature, was removed to permit of the closing of the hatchway. In the morning, about seven o'clock, the men were discovered perfectly insensible, and were removed to the Northern Hospital in that state about nine o'clock. On examination, the three were found insensible, with slow and laboured breathing; pulse scarcely perceptible, the surface cold, the pupils dilated. In about an hour after admission, William Cochrane showed symptoms of recovery; he vomited, and gradually recovered without any bad symptom. Silas Skinner still remained perfectly unconscious, his breathing became more laboured, his pulse more weak, his surface more cold; to all appearance he was moribund. Galvanism was applied, which markedly improved his pulse and breathing during its action; when discontinued, he relapsed into the former state. Hot air was applied to the surface of the skin, an enema containing 4 oz. of turpentine was administered, and sinapisms to the chest and calves. About two o'clock he began to recover; brandy and ammonia were given, and in the evening he was quite conscious. The only further treatment required was the use of the catheter. Neil M'Cormick, about an hour after admission, improved slightly, and vomited. After that, he became perfectly comatose; the breathing still laboured, and pupil contracted; face flushed; he perspired profusely; he ground his teeth, and had some spasms of the extremities; his pulse became harder and quicker. In the afternoon he was cupped to four ounces from the neck; his head was shaved, and cold lotion applied to it; an enema was used, and also sinapisms. Notwithstanding this treatment, he remained in the same state for forty-eight hours. On the third morning he seemed much better; answered questions rationally; breathing natural. After a brisk purge, he appeared quite well, and joined his ship on the fourth day.

CASE OF RETENTION OF MENSES FROM IMPERFORATE HYMEN.

By L. E. DESMOND, Esq.

1851.—March 29th, at 5 o'clock, a.m., I was called on to visit Elizabeth ——, aged 17 years, and found her suffering very great pain, with considerable distension of the bladder, and, on inquiry, found she had passed no water from the previous morning. I passed a catheter, and drew off about two pints of clear urine. Ordered a hip-bath, and the following draught:—Ol. ricini ʒvj., tinct. opii mxx., aq. pulegii ʒj. She had never menstruated, and her

mother attributed the retention of urine to her having hurt herself the previous day, while at New Brighton, riding with some other girls on donkeys on the strand. 10 p.m.—I found she had passed no water during the day. Bowels opened. Passed catheter, and drew off water.

30th.—I was again called up this morning at 6 o'clock, and found the bladder greatly distended, and she suffering great pain. Passed the catheter, and drew off the water. Rep. haustus oleosus. On feeling the abdomen, I observed in the left hypogastric region a very solid painful tumour, about the size of a closed fist. 9 p.m. —Passed water this evening, and felt free from pain, except over the tumour. Ordered pil. aloes c. myrrhæ ij. alt. noctibus.

May 1.—I was again called on, and found the bladder greatly distended, with great tenderness over the abdomen. Ordered ten leeches and hip-bath, after which she passed water freely. Rep. haustus oleosa.

23rd.—Again called upon. She had passed no water for fourteen hours. Bladder distended. Had hip-bath and tinct. ferri mur. without effect. Passed catheter.

July 23.—Again had retention. Passed catheter. She had some symptoms of hysteria. I ordered her decoct. aloes c. Tinct. fœtid. ammon.

18th.—She was now suffering from general and deep-seated tenderness, with great distension of the bladder. A small sharp pulse and furred tongue. Drew off the water, and bled *ad deliquium*, and ordered twelve leeches to the abdomen and poultices afterwards. Cal. gr. x., pulv. Doveri gr. v., statim. Haustus oleosa in four hours after.

19th, 10 a.m.—Had some sleep during the night, and passed water this morning. Tenderness much diminished. Pulse softer. Eight more leeches, and allowed to bleed. 9 p.m.—Tenderness very slight. Pulse soft, and 100. Bowels freely moved. Passed water. Ordered hydr. chlorid., pulv. Doveri, aa. gr. v.

20th.—Tenderness gone, except in the left hypogastric region, where the tumour before noticed is seated, and somewhat larger.

22nd.—Going on well. Rep. aloetic mixture.

Aug. 14th.—Retention of urine; passed catheter; tumour in hypogastric region increased and very painful. Twelve leeches and hip-bath; haustus oleosus. I now told her mother that there must be some obstruction, and that she should submit to an examination, and perhaps operation, to which she would not consent, but said she would wait for some time, and, if not better, she might then do so.

Nov. 13th.—I was again summoned to this girl, and found her in great suffering; the tumour, which had been previously in the left hypogastric region, was now low in the right, and considerably increased in size; and she stated that it had moved to that side soon after I saw her in August, since which time she has had no retention, nor was there any water now in the bladder, as she had voided it in very small quantities during the day. Ordered eight leeches, hip-bath, and, her bowels being confined, she had cal. c. col. I took an opportunity of telling her mother, that I should not again attend her daughter if she would not submit to an examination being made; to which she consented, as soon as she had herself recovered, being then under my care for inflammation of the sub-lingual gland.

Nov. 18th.—I requested the assistance of my friend Mr. Parke, whom I met in consultation, when we made an examination, and found the following:—On passing the hand over the abdomen, in the right hypogastric region there was a dense, firm tumour, giving the idea of an impregnated uterus of some months. On attempting to pass the finger into the vagina, a dense, unyielding hymen prevented, and through it we could discover fluctuation. We made ourselves more certain of its existence by an examination per rectum, and then decided on making an incision for the escape of the pent-up menses. As she was exceedingly troublesome to manage, we attempted to put her under the influence of chloroform, without success,—it only helped to increase her restlessness. I proceeded to make an incision from about half an inch below the urethra down to the perinæum, which was done with very great difficulty, owing to the resistance she made, when at least two quarts of thick dark-coloured fluid escaped, resembling treacle in colour and consistence, and without any smell, after which the tumour quite disappeared. We had her put in a hip bath, and passed a thick tent of lint oiled into the wound, and ordered her cal. gr. v., opii gr. ii.

19th.—Continued discharge during the night. Repeat hip-bath. Introduced a tent of prepared sponge. Haustus oleosus.

20th.—Discharge rather offensive; examined with a small bivalve speculum, and discovered slight abrasion about the os uteri, which was perfectly open, and the neck quite obliterated. We touched the surface with nit. arg., and introduced another tent.

21st.—Discharge continues offensive. Injection of warm water. We continued to keep the wound open until healed.

She menstruated on the 2nd December, and continued for three or four days, and is now in good health.

I would merely remark, that this is one of many cases in which a surgeon is very likely to get into disgrace, so long as he continues to treat for amenorrhœa without ascertaining the cause. The patient becomes tired of only temporary relief, and perhaps applies to another surgeon, who suggests an examination, and thus discovers the cause. I would also remark the absence of chlorosis in this case, as well as in others of a similar character.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 26th ult.:—

Fowler, Richard Sumner, Bath.
Grainger, Henry Homer, Skipton in-Craven, Yorkshire.
Heath, Frederick Ashton, Manchester.
Harbord, William, Hull.
James, William, Newport, Monmouthshire.
King, John Lister Bertram, Belgrave-square.
Mitchell, Samuel Buckland, Kingston-upon-Thames.
Read, Constantine Caridi, Army.

At the same meeting of the Court, Mr. William Ellis Hambly passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date July 2, 1847.

The Fellowship.—The next professional examinations for this distinction will take place at the College of Surgeons on Monday and Wednesday next. We shall publish the questions submitted to the candidates in the ensuing week, and also the list of successful competitors.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 25, 1852:—

Bartlett, John Moysey, Langworthy, Modbury, Devon.
Davies, Thomas George David, St. Andrew's-court, Holborn.
Drew, Samuel, Cornwall.
Freer, Alfred, Stourbridge, Worcestershire.
Hemming, John, Kimbolton.
Jackson, Alfred.
Mullarky, Patrick James, Margate.
Vinall, John, Sutton-place, Hackney.
Willcox, John, Birmingham.

Medical Society of London.—At the last meeting of the Medical Society of London, Mr. Headland, B.A., and Mr. Albert Davis were elected members of the Society; and a testimonial was read in favour of Mr. W. Adams, of New Broad-street, as a candidate for membership.

Military Appointments.—5th Foot: Acting Assistant-surgeon Henry Bowles Franklyn, to be assistant-surgeon, vice Robb, deceased. 10th Foot: Assistant-surgeon John Knox Leet, from the 85th Foot, to be assistant-surgeon, vice Inglis, promoted in the 64th Foot. 64th Foot: Assistant-surgeon James Gordon Inglis, M.D., from the 10th Foot, to be surgeon, vice Archer, deceased.

Medical Appointments and Vacancies.—The office of joint-surgeon to the St. George's and St. James's Dispensary has become vacant by the resignation of Mr. Halls; election on the 8th of April. The Swiney lectureship is vacant: the appointment on this occasion is in the hands of the Trustees of the British Museum; date of election, May 15; office tenable for five years; salary 140*l.* a year. The candidates must be graduates of the University of Edinburgh; the lectures to be delivered in London at a place to be appointed hereafter. Certificates of degrees and testimonials of qualification to be transmitted to the principal librarian at the British Museum.

University College Hospital.—We have great pleasure in announcing the appointment of Mr. Joseph Maclise, F.R.C.S., to the assistant-surgeoncy of the above institution, in the vacancy occasioned by the resignation of Mr. William Cadge. Mr. Maclise is deservedly well known to the profession by his works on Surgical Anatomy.

The University of Munich has conferred the doctorate on Mr. Gray, the industrious and talented keeper of the natural history department in the British Museum.

Obituary.—On the 24th ult., at Northwich, in the 40th year of his age, John Stevens Lee, Esq., member of the Royal College of Physicians, London.

Sir C. F. Forbes, M.D., K.C.H.—We regret much to announce the decease of Sir Charles Fergusson Forbes, M.D., K.C.H., Deputy-Inspector-General of Hospitals, which occurred on the 22nd instant, in his 74th year. Sir Charles Forbes was a physician of high repute, and a thorough gentleman of the old school. Of late years he had retired in a great degree from practice, retaining only, we believe, the physiciancy to the noble family of Londonderry, in whose estimation, as a physician and a friend, he stood higher than any other medical man, not even excepting the late President of the College of Physicians. Sir Charles Forbes, although possessed of a large amount of professional knowledge, has not left any record of his talent in print, excepting, we believe, a paper in one of the earlier volumes of the *Medical and Chirurgical Transactions*. He was physician at one time to the Royal Westminster Ophthalmic Hospital, which appointment he threw up in 1828, in consequence of a disagreement with his colleague, Mr. Guthrie, the surgeon to the establishment, connected with an article published in the *Lancet*, in which reflections were cast on the mode of treating inflammatory diseases of the eye, as pursued in that hospital. Mr. Guthrie commenced legal proceedings against the proprietor of the journal, but abandoned them at a late hour, in consequence of an intimation from Sir Charles Forbes, that he had been subpœnaed, and that his opinion was adverse to the mode of treating those diseases in question, but which mode experience has since fully sanctioned. A coolness ensued in consequence between these gentlemen, and Sir Charles shortly afterwards fought a duel with Mr. Hale Thompson, on grounds connected therewith. Each combatant fired three times, but no blood was shed on the occasion. Sir Charles Forbes was highly esteemed by all who knew him. He was for many years Deputy-Inspector-General of Military Hospitals. He entered the Army Medical Service in May, 1798. In 1808 he was appointed to the staff, and in 1813 he became Deputy-Inspector-General. He served throughout the whole of the Peninsular War, also with the expedition to Ferrol in 1800. In 1801 he served in Egypt. He also took part in the capture of St. Lucia and Tobago, in 1803. The deceased was a Knight of the Crescent and of the Hanoverian Guelphic Order, conferred on him by the late King Ernest, in 1842.

Petitions have been presented to the House of Commons from the governors of Bethlem and the London Hospitals, praying to be exempted from the operation of the Charitable Trusts Bill.

Sir W. Jolliffe is about to introduce a Bill to continue an Act of the 12th year of Her present Majesty, to prevent the spreading of contagious or infectious disorders among sheep, cattle, and other animals.

The Spinal Hospital.—The funds of this excellent institution have just been augmented by the munificent donation of 500*l.*, presented by Admiral Sir Charles Ogle, Bart., from a fund left at his disposal by the late Mrs. Henry Bertram Ogle, of Eaton-place.

Dr. Bachhoffner's Fire without Coal.—We were present, a short time since at an exhibition at the Polytechnic Institution, which, if it only prove commercially successful, will have the effect of settling the question, as to whether we shall have a colliery dock in the Island of Dogs, and will go far to strip the "Silent Highway" of its imposing forests of masts—an experiment, in short, to prove that an Englishman might enjoy his fire-side without troubling himself any longer about coals. Dr. Bachhoffner's new fire, as we saw it burning in the lecture-room of the Institution, at a little distance, looked exactly like an ordinary bright sea-coal fire on a frosty day; but when viewed nearer, it resembled more a charcoal fire at a white heat, without smoke, sound, or flickering motion; indeed, there was a singular unreality about the whole thing, and but for the undoubted heat, which was far greater than that of a common fire, it might have been mistaken for a brilliant transparency. While we were watching it, the inventor called out to "John," who had charge of a gutta percha tube in communication with it, to "turn down," and immediately the fire receded from white to red heat, and then seemed to become nearly extinguished. At the word of command, again it resumed all its pristine brightness; indeed it was quite as much under control as gas. Gas is, in fact, the heating principle of the fire; but water gas, a much cheaper kind than that ordinarily in use. The jets, twelve in number, are distributed among pieces of fire-brick and plates of platinum, which speedily become red hot, and act as radiators of the heat. The pieces of platinum are bent at the edges, so as to resemble coal; in fact, the whole thing is meant so closely to imitate the old original fire as not to shock John Bull's prejudices, whose antipathy to stoves, water-pipes, and every warming contrivance, in fact, before which he cannot spread his tails and comfort himself in the old original manner, is well known. We do not care so much about this servile imitation as Dr. Bachhoffner, who seemed to chuckle at the idea of palming off a sham (in one sense of the word) upon the British public, but we do care and approve of a great many points in the invention. In the first place, there is no smoke; it comes, therefore, powerfully in aid of the sanitary movement, inasmuch as the air of towns might henceforth be freed of its charge of carbon; in the second place, there is no dust, therefore so much less cleaning "and putting to rights" in our households; and, thirdly, it is much more under control than the ordinary fire, and can be used much more economically. For instance, the bachelor, after he has despatched his lonely chop in his lodging, has only with this new invention to turn the tap, and the fire dwindles down to nothing in his absence; a fresh turn when he comes in restores its brightness almost immediately. Dr. Bachhoffner proposes to substitute thin plates of iron or any other metal, as radiating surfaces for kitchen and furnace fires, as the platinum, although indestructible, is rather an expensive material. The idea is to get up a company, and supply the water gas to every house in the same manner as the ordinary coal gas. If this plan should succeed, a vast deal of labour would be saved to our domestic servants, and fire and water will come with equal speed at command,—we say, *if* this plan should succeed, for the estimate of expense we have taken upon the word of the inventor, and this requires of course some verification, and it will also be necessary to watch for some little time the practical working of the thing before a final judgment can be passed upon it.

Extract of a Communication to a Medical Friend from Staff-Assistant-Surgeon W. Black, dated Whittlesea, Caffraria, the 10th January, 1852:—"I have had a considerable amount of professional duty during the last month, and would have had much more if our whole force had been here—the greater part being away with General Somerset, in his expedition beyond the Kei. Among the natives, the chief complaint has been a prevailing dysentery, accompanied very frequently with a constant vomiting of food immediately after meals. The European inhabitants, old and young, have had the same complaints; but the latter affection has been more common than the dysentery, and I have myself, at times, experienced slight attacks of the gastric disorder. Cases of cerebral congestion, just at the change from the hot to the cool wet weather, were also common among all races and classes. In some, but especially in the young, the seizure went on to effusion, producing partial loss of power. I never before witnessed similar cases in such numbers, and they show some peculiar effect from the previous solar heat not before observed, for it is to that, combined with the dryness of the air before the rains set in, to which it must be attributed. Heat of the scalp and dizziness formed part of the symptoms; and the attack would sometimes come on rapidly, the face become blue, or dirty-coloured, and the person in danger of falling down. An emetic and sharp purgative, given at the first, generally checked the seizure taking any permanent effect upon the circulation of the brain; and, when it threatened to become confirmed, a steady and persevering course of medicine adapted to increase all the excretions, especially that of the skin, completed the recovery. Profuse sweating brought about much relief, and the further administration of calomel and James's powder set the remainder all right. The dysentery of the natives, usually occurs at the change of the season, and independent of the nature of the river water, though they may be predisposed by the nature of their food. It assumes the form more of a purely bloody flux, both in children and adults. The complaint is seldom accompanied by fever, till the loss of blood has told upon the system, and created more or less re-action, when the appetite fails, which previously had been fair. An early dose of rhubarb and calomel, in some, arrested the disease at once,—the medicine producing a calming effect, and taking away the constant desire to evacuate. Others required calomel and opium, and others both these and the above powder, in succession or alternately. A prone position always relieves the symptoms,—showing there is a peculiar tendency in the portal blood to gravitate, in the other positions, to the hæmorrhoidal veins. Congestion of this system of vessels there must be, and, of consequence, a diminished biliary secretion; the action of the calomel on the liver may serve to explain its curative effect in these cases. The disease seems to be confined entirely to the large intestines; and why it is so, we have only as a predisposing cause the change of the weather producing no doubt suppression of a profuse transpiration taking place during its hot and dry state, by which the fluids are thrown for excretion on the internal organs. A few doses of medicine at the change of the season would thus anticipate affairs, and cut short any of the

premonitory symptoms,—and this is often a custom among the old settlers before the fruit season. How the natives, with their scanty woolly hair and bare heads, do not become the subjects more frequently of cerebral congestion, I can scarcely explain, except from the less activity of the brain in them than in white persons, who also use more tea and coffee than the coloured races do. These articles no doubt increase the activity of the changes of the cerebral tissues. Wine or spirituous liquors seem to have no predisposing effect in producing these cerebral congestions, as children are as much subject to these affections as their elders. I rather think they predispose many to a contrary effect in this country, by increasing the circulation generally throughout the body, and so relieving local plethora by increasing the excretions of the skin and the kidneys."

INSTRUCTIONS have been issued by the Board of Admiralty, directing that previously to sending any patients, whether officers or men, from Her Majesty's ships to sick quarters on shore, (excepting to naval hospitals or to established surgeons or agents,) a statement is in each case to be required from the medical officer of the ship, signed and approved by the captain or commanding officer, of the particular nature and effect of the disease, and of the reason why the patient could not be safely treated on board; and when there is no medical officer on board the same information is to be required from the professional person to whom the patient is sent. The rates charged for the subsistence and medical attendance of the patients are also to be stated; which rates are to be as reasonable as possible, consistently with providing proper accommodation. The statement is to be transmitted, in every such case, to the Director-General of the Medical Department of the Navy.

GUN-COTTON.—The military commission of the Germanic Diet has granted the sum of 40,000 florins to Professors Schönbein, of Basle, and Böttger, of Frankfort, for their invention of gun-cotton.

MRS. CUMMING.—The Lord Chancellor, on the 27th ult., granted an application on behalf of Mrs. Cumming, who was lately and properly found a lunatic, for a new trial, to decide the question of sanity or insanity. His Lordship alluded to the enormous expenditure already incurred, and directed that the costs should be kept within the smallest possible amount. The whole property of this unfortunate lady will be swallowed up in law; it will be a thorough exemplification of the old fable of the oyster and its two shells. The trial upon the inquisition lasted fifteen days, and several counsel were engaged. At the late application there were three counsel on one side, and no fewer than five on the other. The Lord Chancellor has ordered, that when the new trial takes place, it is to be understood that only two counsel are to be allowed on each side; but no limit was named for their fees, which are frequently enough of themselves to swamp a small property. Lord St. Leonards concluded by remarking, very properly, that "it was in every respect a reproach to the law, that such expenses should be permitted." The preservation of property is much more expensive than that of life. The decision of the Lord Chancellor was to the effect, that a person "found lunatic on a writ '*de inquirendo*,' was entitled to traverse, as a matter of right."

SHIP-FEVER.—Mr. Castles, surgeon, of New York, attributes the great prevalence of ship-fever on board emigrant ships to the following:—The great mass of steerage passengers, or emigrants, to the United States, (with very many exceptions, however,) is composed of the poorest and worst fed of the various European peasantry, and hapless, worn-down, broken-spirited artisans from manufacturing districts, who manage, from their daily, hard-earned pittances, to save a portion to pay for their passage, and the purchase of food sufficient (?) for a boisterous Atlantic voyage. The German emigrants procure dried or smoked sausage-meats, prepared from what? The manufacturer alone can tell. The Irish emigrant procures a few potatoes, a little salt, and a string net to boil them in. The English, the Scotch, and others, procure cheap (damaged) pilot-bread, oat-meal, dried cod-fish, smoked herrings, and, by way of luxuries *par excellence*, a ham, tongue or some bacon, warranted to endure a sea voyage, and to keep in any climate. These execrable viands, true to their recommendation, will "keep," for water will not soften them, climate will not putrify them, nor any known natural functions digest them! 400 or 500 emigrants are crammed in a narrow space, between two air-tight decks, so that each passenger is in the full enjoyment of about 70 cubic feet of atmosphere, which, as a healthy medium of respiration, is exhausted in less than an hour. Not only from the absorption of the vital portion of the confined air by the lungs is this atmosphere rendered unfit for respiration, but an elimination of a deadly poisonous gas from these organs takes place, which, when re-inhaled, poisons the blood, renders it non-electric, and thus prepares it for putrid fevers. Hence arise ship fevers.—*New York Journal of Commerce.*

DEATHS *in the Metropolis for the week ending Saturday, March 27, 1852.*

Causes of Death.	March 27. 0	15	60	All Ages.	Sum o Ten Weeks.
All Causes	504	441	267	1219	11260
Specified Causes	503	441	266	1210	11202
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	145	43	16	204	1969
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	29	13	47	572
3. Tubercular Diseases	75	143	6	224	1927
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	63	30	25	118	1367
5. Diseases of the Heart and Blood-vessels	5	21	27	53	338
6. Diseases of the Lungs and of the other Organs of Respiration ...	94	74	75	243	1932
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	28	34	18	80	618
8. Diseases of the Kidneys, &c. ...	2	11	6	19	90
9. Childbirth, Diseases of the Uterus	...	14	1	15	113
10. Rheumatism, Diseases of the Bones, Joints, &c.	4	3	1	8	77
11. Diseases of the Skin, Cellular Tissue, &c.	2	...	4	6	11
12. Malformations	3	...	...	3	27
13. Premature Birth and Debility ...	25	3	...	28	239
14. Atrophy	30	...	...	30	188
15. Age	...	...	55	55	559
16. Sudden	7	3	5	15	387
17. Violence, Privation, Cold, and Intemperance	15	33	14	62	733
Causes not Specified	1	...	1	9	58

TO CORRESPONDENTS.

Epidemiological Society.—In consequence of the very severe illness of Dr. Bascome, his Paper on Yellow Fever, which was to have been read on the 5th instant, will be postponed.

We must apologise to a host of valued Correspondents, whose communications we have been this week reluctantly obliged to defer. The following are in type:—

Mr. SIMON—On Operations for Retention of Urine occasioned by Inveterate Stricture.

Dr. C. HANDFIELD JONES—Examinations of the Effects produced by Certain Medicines.

Dr. J. B. THOMPSON—On the Simaba Cedron, and its Preparations.

Dr. JOHN D. BROWN—Case of Acute Arachnitis induced upon Chronic Disease of the Brain.

Drs. LESLIE and PENNELL, of Rio Janeiro—Case of Artificial Anus.

Mr. J. V. SOLOMON—Cases and Observations illustrating the Therapeutic Efficacy of Diluted Hydrocyanic Acid as a Topical Application in certain Affections of the Eye.

Mr. JOHN L. MILTON—On a New Way of treating Gonorrhœa.

Mr. MILTON—Hospital Reports.

Mr. HOLL—Report of York County Hospital.

Mr. PRETTY—A few Practical Observations upon Abortions, elicited by the Reported Case of Dr. Foley.

Dr. CUNHAM—On Sulphuric Acid in Diarrhœa.

Mr. MARTIN M. BULL—On a Case of Spasmodic Affection of the Larynx Simulating Laryngitis.

PHILO-CHIRURGUS—On Ingrowing Toe Nails.

A COUNTRY SUBSCRIBER—On Uterine Egesta.

M.R.C.S.—On Medical Assistants and the British Medical Fund.

SCOTUS—On Medical Etiquette, etc. etc. etc.

COMMUNICATIONS have been received from—

MEDICUS; CHAIRMAN of the LEICESTER MEDICAL BOOK SOCIETY; Dr. TANNER, of Charlotte-street, Bedford-square—On the EMPLOYMENT of UREA as a DIURETIC; Dr. HOLLAND, of Brook street; Mr. BEALE, of the Harrow road—CASE of OBSTRUCTION of BOWELS for THIRTY-TWO DAYS; Dr. MAYNE, of Leeds; Mr. SOLOMON, of Birmingham; L. A. C.; SECRETARIES of the WESTERN MEDICAL SOCIETY; VERAX; Mr. HODSON, of Bishop Stortford—CASE of TRAUMATIC TETANUS treated by INDIAN HEMP; A LIVERPOOL PRACTITIONER: Dr. SHEARMAN, of Rotherham; A SUBSCRIBER; N., of C.; Dr. HIGGINS, of Birkenhead—The UTERINE SOUND; A SURGEON; Dr. W. GAIRDNER, of Edinburgh; Dr. GREENHILL, of Hastings; Mr BROWN, of the Statistical Society; Mr. SANDFORD, of Stowmarket—On REFORM in MEDICAL NOMENCLATURE; Mr. BRANSBY COOPER, of Guy's Hospital, and Spring-gardens—LECTURES on HYDROCELE; Mr. CHALK, of Nottingham-terrace—On the TRABECULÆ and BLOOD-VESSELS of the SPLEEN; Mr. GRIMSDALE, of Liverpool.

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It affords the Council much satisfaction to publish the THIRD LIST of CONTRIBUTORS to the COLLEGE, and to acknowledge the cordial and efficient co-operation which has been afforded by those gentlemen who, in acting as Honorary Local Secretaries, have so nobly assisted the Council in the success that has hitherto attended their labours; and, as the Council confidently hope, with the continuance of this support, to be in a position in June next to lay the first stone of the College, they trust that other gentlemen will volunteer their services, and assist them to accomplish that desirable object.

The Council have the gratification to state that, through the munificence of a member of the Profession, a piece of land, consisting of about eighteen acres, which will afford an eligible site for the College, is on the eve of being transferred to the Trustees, on the most advantageous terms.

The Laws for the Government of the College will be ready for circulation in a few days, a copy of which will be forwarded to each of the Honorary Local Secretaries.

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ORIGINAL LECTURES.

CLINICAL LECTURE

AT

University College Hospital.

By E. A. PARKES, M.D.
Professor of Clinical Medicine.

CONDITION OF THE URINE IN TWO CASES OF CHRONIC BRIGHT'S DISEASE—AUGMENTATION OF THE ALBUMEN AND OF THE ACIDITY AFTER FOOD—DIFFERENCES IN SPECIFIC GRAVITY, IN COLOURING MATTER, AND IN SEDIMENTS OF THE URINE, OF FASTING AND OF FOOD—CONDITION OF THE BLOOD—PRESENCE OF ALBUMEN IN THE FÆCES—EFFECTS OF ACIDS ON ALBUMEN—CHEMICAL COMPOSITION OF A FLUID FROM A CYST IN THE KIDNEY.

Gentlemen,—Two or three patients with kidney disease, who have just quitted the hospital, have presented facts of some interest and novelty, more particularly as connected with the state of the urine; I shall detach these facts from the general clinical history of the cases, in order to bring them more fully before you. I shall speak, then, of—

1*st. The Condition of the Urine in Two Cases of Chronic Bright's Disease.*

The general characters of the urine in chronic Bright's disease have long been known; among the chief of these characters are,—the increase in the quantity of water, as a usual rule; the alteration of the colouring matter, both as to physical appearance, and sometimes as to its re-action with nitric acid, (which may give a violet tint;) the tendency to diminution of all the normal urinary constituents (of the urea, the uric acid, the so-called extractives, including the kreatin, the salts, soluble and insoluble;) the presence of albumen in solution, and of various matters derived from the blood and from the kidney structures, in suspension. Still, the condition of the urine is by no means perfectly understood, and it is probable that a deeper study of it will add materially to our knowledge of Bright's disease.

The first case now referred to was that of Daniel Lee, aged 50, admitted on the 1st of January; the date of origin of the disease was uncertain. When admitted he passed, on an average of fifteen days after admission, 75 oz. of urine, of a specific gravity of 1011·6, every 24 hours, and micturated usually seven times every night, and five or six times during the day. The urine was constantly albuminous, occasionally contained a little blood, varied in colour from a pale straw to a smoky brown, and had frequently a deposit of renal epithelium, casts of tubes, uric acid, and amorphous urate of soda. There was also coincident enlargement of the liver, and, as secondary to the kidney disease, there was œdema of both lower extremities.

The second case was that of John Fountain, aged 28, who was admitted January 26th. He laboured under secondary and tertiary syphilis of four years' duration, consolidation (supposed to be tuberculous) of the apex of the right lung, enlarged liver, and Bright's disease. He passed, on an average of 18 days' observation, 57 ounces of urine in 24 hours, of a specific gravity of 1011·4, and micturated from four to twelve times during the night. The urine was constantly albuminous, and deposited occasionally renal epithelium, casts of tubes, and amorphous urate of soda. As secondary to the Bright's disease, there was œdema of both legs, and the bowels also were inclined to be relaxed.

In neither case was the disease advanced to its extreme degree, although it was going on rather rapidly in Fountain. Lee left the hospital to go to his work, and Fountain got tired of the restraint, and left also. In each case, supposing the disease runs on to a fatal termination, this will not occur probably for a year or two, or, it may be, at a still more distant period.

These facts are sufficient to justify the diagnosis of the disease, and to show at what point these two men were. Let me pass now to the condition of the urine. It is of course impossible to say whether the same facts hold good for all cases of chronic Bright's disease; that they do for a certain number there can be little doubt.

(a) *In both Cases the Quantity of Albumen in a given Quantity of Urine, varied greatly at different times of the Day, being more abundant in the Urino Cibi, than in the Urina Sanguinis.*—Both these men dined at 12 o'clock, had tea at 5, and breakfasted at 8. In the case of Lee we examined the urine passed immediately before breakfast, after thirteen hours' fast, with that passed two hours after breakfast; while in the case of Fountain we compared the morning urine before breakfast with that passed three hours after dinner. These examinations were very carefully made by my friend Dr. Burder. In all the examinations, with one exception, the morning urine gave evidence of a small, and the urine after food of a greater, amount of albumen. To give you an idea of the difference, I will quote a few individual reports for a certain number of days, and then give the average of the rest. You will understand that each specimen was examined in the same way, boiled with the same quantity of nitric acid for the same length of time, and then allowed to stand. The quantity of albumen was estimated in the way customary in the wards, where we cannot dry and weigh our precipitates, viz., by reckoning the proportion of the sediment to the height of the fluid.

Daniel Lee.—Jan. 24.—*Morning urine*, albumen a mere cloudiness; *breakfast urine*, albumen 1-4th.

26th.—*Morning urine*, albumen a slight milkiness; *breakfast urine*, albumen 1-8th.

27th.—*Morning urine*, albumen 1-18th; *breakfast urine*, albumen 1-10th.

28th.—*Morning urine*, albumen a mere milkiness; *breakfast urine*, albumen 1-6th.

29th.—*Morning urine*, albumen 1-8th; *breakfast urine*, albumen 1-5th.

30th.—*Morning urine*, albumen 1-7th; *breakfast urine*, albumen 1-7th.

Average of 7 subsequent observations.—*Morning urine*, albumen 1-6½th; *breakfast urine*, albumen 1-3⅔ths.

John Fountain. — Feb. 26.—*Morning urine*, albumen a very slight deposit; *dinner urine*, albumen ½.

29th.—*Morning urine*, albumen a cloudiness, not depositing; *dinner urine*, albumen 1-3rd.

March 2.—*Morning urine*, albumen 1-5th; *dinner urine*, albumen, ½ or ⅓.

5th.—*Morning urine*, albumen 1-12th; *dinner urine*, albumen, ½.

6th.—*Morning urine*, albumen; considerable turbidity of urine, but scarcely any deposit; *dinner urine*, albumen 1-2½th.

To come to a more exact method of estimating the difference in quantity; on the 15th of March, I estimated the quantity of albumen in Fountain's urine, by boiling with alcohol, washing with alcohol, drying, and weighing; calculated per 1000 parts of urine, the result was—

Morning urine.—Albumen 1·771 per 1000 of urine.

Urine passed 3 hours after dinner.—Albumen 15·248 per 1000 of urine.

You will perceive in these cases, with one exception, (in Lee, Jan. 30, when the quantities were equal,) the abundance of albumen in the urine of food, and its scantiness in the urine of blood. Let me now take up another point, to return to this presently.

(b) *The Specific Gravity of the Urine of Food was always greater than that of the Urine of Fasting, but judging from a Single Experiment, the Increase of the other Solids did not appear to be so great as the Increase of the Albumen.*—The admirable observations of Dr. Bence Jones have taught us the peculiarities of the urine before and after food; an increased specific gravity in the latter case is the rule. On an average of seventeen observations, Lee's morning urine had a specific gravity of 1011, and the breakfast urine of 1013·4. On an average of four observations, Fountain's morning urine had a specific gravity of 1011·8, while the urine passed after dinner had a specific gravity of no less than 1025·8. Was it simply the difference of meal that caused this difference of specific gravity of the urina cibi of the two men? I have no observations to bear on this point at present. (a)

The specific gravity is of course a very uncertain indication of the quantity of solids: a single experiment on Fountain's urine gave us a more exact estimate. On the 15th of March the morning urine contained in 1000 parts 36·811

(a) Since this lecture was delivered, I have had an opportunity of examining the urine passed after dinner by Lee. It resembled the urine passed after breakfast, and it is therefore to be inferred, that the difference noted above was not owing to difference of food. The disease in Fountain was advancing with much greater rapidity than in Lee, so that the transudation of albumen may have been going on more rapidly.

parts of solids, of which as above stated, 4·771 parts were albumen; the dinner urine contained in 1000 parts 61·838 parts of solids, of which no less than 15·218 parts were albumen; so that in the two specimens the non-albuminous solids were to each other as 1 is to 1·53, and the albuminous as 1 to 3·2. Or, to give another illustration of the great comparative as well as absolute increase of the albumen: of 100 parts of solids of the morning urine albumen would constitute 14·87 parts; while, in 100 parts of the solids of the dinner urine, it would constitute 30·74 per cent.

(c) *The Quality as well as the Quantity of Albumen was probably different in the two Urines.*—Unfortunately both the patients were anxious to leave the hospital before the observations were completed, and I have only a single experiment bearing upon this point. Boiled with alcohol, Fountain's morning urine threw down a precipitate in the ordinary way, and the solution was easily filtered; the dinner urine boiled in the same way became almost gelatinous, and was filtered with great difficulty. With nitric acid the behaviour was the same as usual, in both cases; with acetic acid no experiment was made.

(d) *The Normal Rule for Acidity of the Urine as deduced by Dr. Bence Jones was Reversed in these Two Cases.*—We have had opportunities, of course, of observing in other cases the truth of Dr. Bence Jones's important law; but it has occurred to me in several cases of Bright's disease to find it fail. Thus, out of seventeen examinations of Lee's urine, that passed after food was in sixteen cases distinctly more acid than that passed after thirteen hours' fasting; in one case no difference could be found. In eight examinations of Fountain's urine, in six the urine of food was very much more acid than the urine of fasting; in one case there was no difference, and in the other it is only stated that both were moderately acid. The difference between the two specimens was often extreme, the acidity being faint in the morning, and extremely strong after dinner. In the case of Lee, the breakfast urine, although sometimes strongly acid, was, on the whole, less so than the dinner urine in the other case. The nature of the acid was undetermined. In these cases the greater acidity was marked at once when the urine was passed, and did not appear afterwards from any formation of lactic acid, as explained in Scherer's beautiful investigations.

(e) *The Colour Varied.*—The morning urine was always pale, and never smoky; the food urine was darker, though sometimes not much so, and was occasionally very dark, brownish-red, and smoky.

(f) *The Sediments were Different.*—In accordance with Dr. Bence Jones's observations, the food urine presented generally copious deposits of lithates; the fasting urine had none, or merely a very light flocculent deposit. We unfortunately did not observe at what time the casts of tubes were most abundant.

To sum up all these observations, we may say that in these two cases there was an excess of albumen (of particular quality), of colouring matter, of acid, and of non-albuminous solids, in the urine of food as compared with the urine of fasting.

2nd. The Blood.

Lee was bled from the arm after food; Fountain in the morning, while fasting. The serum of the first was milky; of the second, limpid. This appears to be the usual rule, and not to be in any way peculiar to Bright's disease. The serum of blood drawn three hours after food is, not indeed invariably but, generally milky, either from fat (and then ether in a few minutes in some cases, in a few hours in others, dissolves it) or from protein molecules, (molecular fibrin of some,) which are insoluble in ether, and vary in their re-action with acetic acid, being sometimes soluble and sometimes not. In some cases, as in diabetes, the milkiness is so great as to be decidedly abnormal. In Lee's serum, the milkiness was from protein chiefly, if not entirely. Both specimens of serum were slightly alkaline at first. After several days, Lee's serum became distinctly and spontaneously ammoniacal and effervesced with acids, as if it had contained urea which had undergone metamorphosis. The re-action, after fifteen or sixteen days more, became neutral. Fountain's serum, at first alkaline, after eleven days became neutral. This loss of alkalinity is a striking circumstance, as it scarcely ever occurs except perhaps after cholera, pyæmia, and some acute inflammations; in fact, in some observations I have made on this point, serum has preserved its alkalinity even to advanced putridity.

As I required the serum for a special investigation into the quality of the albumen, which is not yet completed, I did not determine anything more respecting the different quantities of its ingredients.

3rd. The Fæces.(a)

It has been lately stated by Lehmann that albumen can be extracted from the stools in Bright's disease. We tested the accuracy of this statement in Fountain's case; a firm stool, perfectly free from even a drop of urine, was digested in a diluted solution of liquor potassæ; a dark-coloured solution was formed, from which heat and nitric acid threw down a considerable precipitate. Further inquiry is necessary before the degree of importance of this fact can be determined. It may or may not be peculiar to Bright's disease, among chronic maladies. I suspect not. In 1848, I instituted a series of analyses of fæces, and found that, even from a perfectly healthy stool, both water and liquor potassæ would take up an organic matter coagulable by heat and nitric acid. It appeared to me then, before proceeding with the investigation, which I had commenced, of the albuminous fæces of Bright's disease, it would be necessary to determine exactly the condition of healthy stools in this respect. Other engagements prevented my carrying on this inquiry; but the observation on the healthy stool shows that an extended investigation is necessary in this direction. It is a point well worthy of inquiry; the whole subject of the intestinal derangements in Bright's disease is quite unexplored at present. Lehmann notices also the occurrence of albumen occasionally in healthy stools.

Leaving now the significance of the undoubted fact of the occasional existence of albumen in the stools, both firm and loose, of Bright's disease, to be determined by future observation, let me return again to the condition of the urine. Whether the disproportionate increase of the albumen in the urina cibi, and the reversal of the ordinary rule of acidity of the urine, be universal phenomena or not, is a matter which I shall not now discuss. They were real and undoubted facts in these two cases, and therefore we have to try and explain them.

Why was the Albumen in greater Quantity in Urine after, than in Urine before, Food?—It would take me several lectures to enter fully into this subject, and I must, in fact, content myself at present with dogmatically stating the various conceivable explanations.

1. It may be supposed that the albumen of the food was in excess of the wants of the system, and passed out from it unchanged in consequence of the system failing to convert it into other compounds, or because the kidneys allowed it freer passage. There are various objections to this view, the most important of which is that it does not meet all the facts of the case.

2. It may be conjectured, that in Bright's disease the percentage of albumen in the blood cannot reach above a certain standard without its passing off through the diseased kidneys, the circulation through which has been from prior causes profoundly deranged, or that the quantity of additional fluid introduced into the system after food produces increased congestion and transudation. There are many objections also to this view, of greater or less weight.

3. A third hypothesis may be advanced. The albumen itself may be in a condition in which it tends to pass off; the determinate direction in which it leaves the body being now given by the disease of the kidney, or having been given in the first instance by special influences affecting the kidney more than other parts.

Whereas the first notion would refer the phenomena to some part of the system yet unindicated, but in which the superfluous albumen is ordinarily converted into other compounds, (if this really be the case as commonly assumed,) or would connect them with functional derangement of the kidneys, the second would make the phenomena a consequence of organic disease of the kidneys, and the third would trace them to diseased blood, and, in the last analysis, to a perversion of the digestive process.

Without discussing these opinions at length, some few points of interest, which favour the last hypothesis, may be referred to. We had in our cases, as coincident phenomena, increased acidity and increased quantity, and perhaps altered quality of albumen, in the urina cibi. As an hypothesis it is allowable, in order to facilitate investigation, to couple these facts together; and, coupling them together,

(a) Physiologischen Chemie. 3r. Bd., p. 142.

it is impossible not to be reminded of the remarkable effects of acids on albumen. Many acids render albumen incoagulable, for the time at least, and increase its diffusive power. For example, as pointed out by Berzelius, and lately so fully illustrated by Lieberkuhn,(a) acetic acid, added in quantity to the serum of blood or to albumen, produces a remarkable effect,—the albumen forms a jelly-like solid mass, such as you see here; heat this mass, and, instead of coagulating, it melts; allow it to cool, and it again gelatinizes; and thus it may be dissolved by heat and gelatinized by cooling till a considerable quantity of water is driven off. This gelatinized serum is soluble in boiling water and in alcohol. But the albumen has not only thus become soluble, but, if a little water be added, it passes readily through filtering paper. This was a fact pointed out first by Mr. Graham, who showed that an acid solution of albumen diffuses readily through a membrane; an alkaline solution scarcely at all. Other acids act in the same way as the acetic, such as the phosphoric, the tartaric and, in certain proportions, even the nitric and the hydrochloric.

These remarkable facts will not surely be barren for physiology and pathology; it is possible, nay it is not too bold to say it is probable, that the whole subject of exudation of albumen and fibrin from vessels may be connected with similar conditions.

But, not to quit our present subject, is it not a fair hypothesis (embracing the facts of diminished alkalinity of blood, increased acidity of urine, and exudation of albumen into parts where normally it does not pass,) which supposes that some deep disorder of the process of digestion in its early stage, whereby the albumen and the fibrin, ordinarily so indiffusible, are rendered capable, by combination with an acid, of passing through membranes, might be the cause why in these two cases the albumen of the food appeared in quantity in the urine?

Whether the hypothesis now stated can maintain its ground, or can be supported by additional facts, time will show. At present it is a conjecture merely, but a conjecture which is well worth following. For my own part, I cannot help thinking, that in this direction some novel facts may be brought out, and, speaking generally of the *genesis* of Bright's disease, I believe that the progress of inquiry is tending more and more to support the view advocated so ably by Dr. Walshe, which looks to some condition antecedent, if I may so term it, to the kidney, as the cause of Bright's disease. But this Gordian knot is not to be cut hastily; we must yet wait for further facts from the able observers of this and other countries before we can venture on a definite solution.

One qualification is necessary here. As far as I have seen, (except, perhaps, in one case, not otherwise referred to here,) no length of fasting will make all the albumen disappear from the urine. The albumen in the urine after food may, then, be supposed to own two sources, the food on the one hand, and the albumen, previously in the blood, on the other.

The last point I shall bring before you to-day is on rather a different subject, viz.—

4th. The Composition of a Fluid in a Cyst of a Kidney.

A man came into the hospital a few days ago with ulceration about the larynx and œdema glottidis. He died four hours after his entrance suddenly, and before tracheotomy could be performed. Both kidneys were cystic to an extraordinary degree, the cysts being of great size, and holding in some cases more than a drachm of fluid.

I shall not bring before you at present any of the anatomical or microscopical features of these cystic kidneys—the microscopic examination was, indeed, very imperfect—but shall merely refer to the chemical constitution of the liquid of the cysts. In many of the cysts the fluid was pale brown in colour, and transparent; in others it was turbid, and darkish brown; the two fluids had, however, apparently the same chemical composition. Both were slightly acid, and contained no urea, and traces merely of uric acid. Both contained an immense amount of an albuminoid substance. I term it "albuminoid," because its re-actions were peculiar; thus nitric acid threw down in both fluids a copious precipitate, *which was almost entirely dissolved by excess of acid;* water being added to the acid solution, reproduced the precipitate, but more water and heat again dissolved it. Alcohol threw down a copious precipitate, *which was entirely dissolved by water*, herein resembling the modifications of albumen lately described by Scherer in the fluid of ovarian cysts. Hydrochloric acid threw down a precipitate which was also soluble in excess. Acetic acid in small quantity produced no effect; in large quantity, gelatinised the albumen, as in the case of serum of blood. The quantity of this albuminoid substance was estimated by precipitating and washing with alcohol. The clear brown fluid had the following composition in 1000 parts:—

Albuminoid substance	62·27
Soluble salts (by incineration) ..	5·89
Insoluble salts (by incineration) ..	3·2
Undetermined organic matters ..	11·35
	82·71
Water	917·29
	1000·00

This observation is so far confirmatory of the statement of Frerichs, that urea and uric acid are not constituents of the cystic fluids; at least, the former body was not present, and the latter could not be obtained in a quantity which was weighable, from the small amount of fluid at my disposal.

The changes which occur in the albumen in ovarian and kidney cysts, are extremely curious. No doubt these fluids are derived from the blood, the different constituents of which undergo some singular metamorphoses which are not fully understood.

(a) Muller's Archiv. 1848. p. 255.

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St. Thomas's Hospital,

By JOHN SIMON, Esq., F.R.S.

OPERATIONS FOR RETENTION OF URINE OCCASIONED BY INVETERATE STRICTURE.

Gentlemen,—When your patient, by reason of a stricture in the urethra, is unable to empty his bladder along the natural channel, and when you are foiled in your utmost endeavours to effect this for him by catheterism, or by the employment of other appropriate means,—in that emergency, when it arises, how are you to give an artificial vent to the urine?

I purpose illustrating to you, in the present lecture, what I consider the right answer to this question. I shall explain to you the general principles which determine the surgeon to make artificial openings into the urinary passages; and I shall give you the *rationale* of a line of treatment, which you have seen me adopt successfully in various cases, as a substitute for the operations more commonly practised.

First, however, let me impress on you that, in the hands of a skilful surgeon, the emergency to which I advert is not a frequent one, and that you must not too readily admit its existence as your ground for the operations in question. I cannot now go into the whole subject of inveterate stricture; but, if you have given attention to the routine of hospital practice during a few months, you must know that, in an immense majority of instances,—even of very old, very tight, very obstinate stricture (provided other conditions are absent to which I shall presently refer) we succeed in giving relief, without recurring to the last expedient of knives or trocars.

The necessity for making an artificial opening into the urinary passages may be established, for such cases as we are considering, under any one of these three conditions, viz.:—

(1) All means for procuring the natural discharge of urine may absolutely fail; (2) urgent constitutional distress may render it dangerous to temporise, as in attempting the gradual dilatation of the stricture; (3) the urethra may have ulcerated at the seat of stricture, and may be allowing extravasation of urine to occur, with its attendant widespread mischief.

1. As regards the first condition, I believe it to be of the very utmost rarity. Taken simply and singly, it has never yet driven me to the necessity of operating. The local state of stricture which determines complete retention of urine is a compound one. Though the canal be permanently so small as to make urination very laborious, perhaps allowing the patient to effect it only *guttatim*; yet that which brings

him to a dead lock is a temporary work. The mucous membrane is swollen by some additional congestion of blood, or the canal is obliterated by muscular spasm. And over this temporary aggravation we have great control. A full dose of opium,—aided, perhaps, by leeches to the perinæum and by the hot bath, or in some cases preceded by the action of a brisk purgative, will generally give relief; and thus, even if we cannot extemporaneously get a catheter into the bladder, we can re-establish the patient in his previous state of dribbling urination; we can ensure that his bladder shall partially evacuate its contents; and we can gain time for that gradual dilatation of the stricture which will bring more complete and permanent advantage. With these resources in your hands, and with an expert,—but, above all, a gentle and patient, management of the catheter, I can promise that you will scarcely ever find yourselves defeated in uncomplicated cases of retention of urine from stricture. Should that rare contingency arise; should your milder measures utterly fail; should the urethra remain absolutely impervious,—letting in no catheter, letting out no urine; then undoubtedly, as I have stated, this condition would establish a necessity—a legitimate, and imperative, and urgent necessity—for your making an artificial vent for the distended bladder.

2. The second specified condition for the performance of such an operation is a more frequent motive than the first. The stricture, though very close, may not be quite impervious; it may let enough urine pass to keep the bladder free from fatal distension; it may even (though this would be unusual) permit your smallest catheter to traverse it; yet, with all this, your patient may be dying. He is an old man, perhaps, with a shattered constitution; he has been plagued with his stricture for years; it has been neglected or aggravated; his urine is fetid and full of pus; he has had constantly recurring rigors; his loins are painful and tender; every attempt at dilatation of his urethra gives severe suffering; his shiverings and sweatings have left him each day feebler; his weak pulse beats above 100 in the minute; his hands are tremulous; his tongue is getting dry; he is threatening to become typhoid,—breaking down under the prolonged irritation of his local disease. You may entertain no doubt that, with time, you could dilate his stricture; but here exactly it is, that time is an ally you cannot reckon on. A fortnight or three weeks would be requisite for your endeavour to have any success; and far within that period you would have nothing but the dead body to catheterise. Here, obviously, there is urgent need for immediate and complete relief,—for relief that shall at once put the man into a tranquil and painless state; and the establishment of an artificial outlet for his urine is the clear indication of treatment.

3. The third condition which I have stated to warrant the necessity of this proceeding, is that under which we most commonly adopt it,—where, namely, the urethra has given way behind the seat of stricture, and presents an aperture through which, at every contraction of the bladder, urine is effused amid the adjacent textures, exciting them to inflammation and gangrene. I need hardly tell you, that cases of this description are among the most urgent in surgical practice, and that the utmost promptitude of relief is requisite for the patient's safety. Though the stricture, so far as that goes, may be of a kind likely to yield to gradual dilatation, yet, pending this slow process, what is to become of the urine? Is it to continue its destructive course of effusion amid living textures? Manifestly not; and therefore the local treatment resolves itself under two heads: first, to adopt such a course, relatively to the strictured and perforated canal, as will prevent any further extravasation of urine; secondly, to make such incisions as may be requisite for discharging out of the infiltrated tissues all their fetid accumulation of urine, pus, and sloughs. In seeking to fulfil the former of these indications, we find it necessary (as under the conditions previously considered) to make an artificial passage for the urine; and the operation, as I have said, has its most frequent necessity in the condition here adverted to. Out of six cases, which I shall presently bring before you, in which I was obliged to perform the operation in question, five were cases in which the urethra had given way, and extravasation of urine was in progress.

And now, gentlemen, suppose the necessity to be established for your giving an artificial passage to the urine;—suppose one of the three conditions to be present which I have stated to you; that you cannot procure any discharge whatever by the natural channel; or that your patient is suffering urgent constitutional distress from the insufficiency of such relief as you have procured him; or that the perinæum and genitals are beginning to swell with extravasation of urine;—now, what course have you to adopt?

The operation which for a great many years has been prevalent here (and, indeed, in most London schools of surgery) has been the following:—(1) A catheter or sound has been passed up to the seat of stricture, at or near the bulb of the urethra; (2) a long cut has then been made in the raphe of the perinæum, reaching down to the urethra, and opening it behind the seat of stricture; (3) the urethral incision has been prolonged forwards, towards the point of the catheter or sound, so as to split open the contracted portion of the canal; and finally (4) all impediments being overcome, a large catheter has been conducted along the urethra into the bladder, and there secured by appropriate bandages.

You will find this operation fully described in Mr. South's translation of Chelius, and spoken of as the practice of the Borough hospitals for the past thirty or forty years. And, if you wish to see the operation in its most favourable aspect, you cannot do better than observe it in Mr. South's hands, who has had great experience in the proceeding, and who executes it with all the care and patience which are indispensable for its success.

Professor Syme, of Edinburgh, who is a great authority in such matters, speaks of this operation as "protracted, uncertain, dangerous, and unsatisfactory." Looking to its average performance, I must say my experience would justify this censure. It is *protracted*, for the patient undergoes severe manipulation during a period, of which the mean would be twenty to thirty minutes. It is *uncertain*, for the division of a stricture or strictures to which one is so imperfectly guided, cannot be accomplished with facility; nor can one feel sure, under the most favourable circumstances, that one's scalpel has hit the exact line of a canal contracted (perhaps for an inch of its length) to such narrow dimensions as scarcely, if at all, to admit the smallest catheter. (a) It is *dangerous*, because (in addition to the sources of risk just adverted to) large hæmorrhage not unfrequently contributes to exhaust the patient; and further, because in many cases (as where the urethra is contracted throughout its whole spongy portion) a catheter cannot be maintained in the passage, without prolonging that state of pain and irritation which already have set life in jeopardy. And *unsatisfactory* it must be on all these grounds. For what can be more so, than to conclude a severe and dangerous operation with uncertainty, as to whether one has accomplished that very object for which the severity and the danger were encountered?

These objections apply to the proceeding as practised by the best (I mean the most careful) operators. In other than good hands, it is a very horrid affair: metallic instruments are thrust in all directions; they leave the canal at one place, and re-enter it, by perforation, at another; or they pass up to the hilt—one shudders to think where!—and draw no water; the rectum, the prostate, even the bladder, undergoes injury in these violent efforts, and the patient is eventually sent to bed, it may be with his bladder unemptied, having his chance of cure sensibly diminished by the infliction of so much unnecessary mischief.

We cannot be surprised that many surgeons have taken refuge from the precarious chances of this operation, in the comparatively simple and secure process of tapping the bladder by the rectum or above the pubes. I shall presently describe to you the operation which, generally speaking, I consider a far preferable alternative even to these. But, before examining their comparative merits, I have still something more to say in respect of the last.

Within these few years, Professor Syme has introduced a method of dealing with obstinate strictures, by dividing them on a director previously passed through the constriction; and you may ask whether the adoption of this manœuvre would be applicable to the cases we are considering, so as to remove the objections I have expressed to the operation of dividing the stricture without any such assistance? I think not. The cases heretofore treated by Mr. Syme's

(a) "Even under the most favourable circumstances, it cannot be otherwise than doubtful whether the stricture be properly divided; that is, whether the incision has passed through the narrow canal in the centre, or through the solid substance on one side."—*Brodie on Diseases of Urinary Organs*, p. 65.

operation have not been cases where the primary consideration is to give immediate relief to a distended bladder, or to provide against advancing extravasation of urine; and in cases such as these there are generally circumstances which would render the director inadmissible. If the urethra is impervious to a small catheter, it is not likely to yield to this other instrument; if the canal has ulcerated, so as to communicate with infiltrated and sloughing tissues, or is riddled with false passages, the director would be not unlikely to prove a treacherous guide. Here and there one might find a case in which (supposing division of the stricture to be our desideratum) Mr. Syme's principle would admit of application; but, speaking generally, I may repeat that his proceeding relates to quite a different class of cases.

But, gentlemen, if that "protracted, uncertain, dangerous, and unsatisfactory" operation, which I have described, could admit of serviceable modification by Mr. Syme's proceedings, there is yet another reason, I think, which would induce us to reject it.

The operation held its ground because of its alleged completeness. The notion of dividing (and therein *curing*) the stricture, at the same moment as one gave relief to the distended bladder, was indeed charming. But, of late years, surgeons have discovered, that this seductive completeness had in it a practical fallacy. The division of the stricture was the sheerest superfluity. Let the bladder be relieved any how,—by the perinæum, by the rectum, by the pubes; merely let the stricture for a while be undisturbed by the constant irritation of urine urged against it from behind, and there speedily occurs a spontaneous perviability of the canal. The stricture wants no cutting. It loosens itself.

So remarkably does this effect belong to the withdrawal of pressure from the stricture, that it arises, not only when the surgeon has made an artificial outlet for the water, but also under far less favourable circumstances; namely, where the urethra has given way behind the stricture, and where the bladder expends its chief expulsive force in driving the urine into surrounding textures. "The first effect of this mischief (says Sir Benjamin Brodie) is to relieve the patient's sufferings; there is no more straining, and the spasm of the stricture, no longer excited by the pressure behind, becomes relaxed, so as to allow some of the urine to flow by the natural channel." Further, in the very numerous cases where the endeavour to divide a stricture has been defeated by the difficulties I have adverted to, and where (contrary to the performer's intention) the operation has not advanced further than the stage of cutting into the bladder or urethra somewhere behind the obstruction, the same loosening of the stricture has been observed to ensue, as though it had actually been divided.(a)

Surely, it cannot be desirable to incur difficulties and dangers in attempting to divide a stricture, when the same advantages spontaneously arise without that division being accomplished.

These considerations have led me to the modified perinæal operation, which you have seen me perform in various instances, and which consists simply in this: I open the urethra by puncture (or by very small incision) immediately in front of the prostate gland. I run a short elastic catheter along this wound to the bladder. I leave the stricture quite untouched for ten days (more or less) during which the urine flows entirely by the perinæal catheter. At the end of this time, I find the stricture sufficiently relaxed for me to begin its dilatation with a middle-sized instrument; and I thus obtain all the advantages assigned to the severer and more difficult measure, while adopting an operation of extreme slightness and security.

I have already intimated to you, that many surgeons, feeling the risks and difficulties which are inseparable from the ordinary perinæal operation, have chosen rather to tap the bladder, in such cases as we are considering, either above the pubes or by the rectum. Obviously, on the principles which I have stated to you, either of these proceedings might give very satisfactory results. The bladder would be effectually emptied, and the stricture relieved from irritation; supposing the urethra to have given way, diffusion of urine would be prevented; and neither of these operations can be considered very difficult or very dangerous.

If, therefore, my choice lay between the ordinary perineal operation and these other expedients, I should not hesitate to prefer one of the latter. But the modified perinæal operation which I advocate is still simpler and safer.

I admit, for instance, that tapping the bladder through the rectum is not a very difficult or very dangerous operation. A man of ordinary skill can hardly bungle it. Yet it is not quite so simple a matter as driving your trocar into a hydrocele. It requires some practice and dexterity. I have known an able surgeon, in attempting it, make two successive stabs; the first *went by the side* of the bladder, the second *transfixed* it. And I should doubt whether, even under the most skilful management, the peritonæum would always be so safe from injury as the advocates of the operation believe.

But assuming, for argument's sake, that the manipulation shall never miscarry by any such slips as these, I can still scarcely approve of the operation. To bore a hole through the rectum would seem, at first blush, a roundabout way of emptying the bladder. It strikes me as an awkward and unworkmanlike proceeding, to involve a second viscus unnecessarily in the attempt to relieve a first. One would wish to minimise the injury of one's operation; and, if one can relieve the bladder equally well without wounding the rectum,—if one can accomplish one's purpose by a direct cut through the common integuments, or little more, surely one would argue *primâ facie* that the rectum should be let alone. For the wounding of the bowel cannot be a matter of indifference. The track of the trocar between the seminal vesicles must be the seat of irritation,—not often, perhaps, to a serious extent, but certainly sometimes. Occasionally, no doubt, an abscess forms there, aided by a little infiltration of urine; and from such a beginning as this very multiplied mischief might arise and continue. I understand there died in this hospital, not long ago, a patient who, at some previous time, had undergone elsewhere the operation in question; and in whom the irritation occasioned by it had never subsided. There had apparently been formed (in the manner just suggested) an abscess between the two openings; urine continued to flow through the rectum, with extreme discomfort and tenesmus; and the man's health was undermined by this continued suffering and irritation. I repeat, therefore, that the rectal operation, as compared with the ordinary perinæal section, presents unquestionable advantages; but, as compared with the modified perinæal operation, it must be considered, I think, to have the disadvantage of inflicting unnecessary injury, and incurring unnecessary risks.

The supra-pubic tapping of the bladder is even easier of performance than the rectal operation, and has some other arguments in its favour. Indeed there are cases, though not such as we are now considering, in which the bladder cannot be relieved by any other proceeding. Such are the cases in which invincible retention of urine is occasioned by tumours of the prostate; for here, obviously, no perinæal incision would carry us beyond the obstruction, and the morbid growth would render tapping *per rectum* difficult or impossible.

But, as respects cases in which our necessity to operate depends on stricture and its consequences, I cannot think the supra-pubic puncture a desirable proceeding. The distance to which the contracted bladder retreats, so soon as its contents are discharged, is a matter of serious inconvenience. The areolar tissue between the bladder and the abdominal wall may easily get irritated by soakage of urine. The opposed edges of the recti would, in any such case, be an obstacle to the escape of the unhealthy accumulation. Further, notwithstanding the facility of the puncture, mischances have happened in its performance; and, both in the operation and afterwards, the posterior wall of the bladder has suffered from the trocar or the canula.

Reviewing the objections I have briefly stated, I cannot but give a decided preference to the modified perinæal operation, in all cases which admit its execution. The point of the urethra selected for the puncture is definite in its position. It is readily reached from the surface of the perinæum. No important parts intervene. The subsequent escape of urine is direct. The position of the catheter causes little inconvenience. The perinæal incision necessary for reaching the urethra is in nearly all cases required by accumulations

(a) "In cases of stricture, if the stricture be so far forward that it be not involved in the wound in the perinæum, or by sloughing, if urine be extravasated, it generally relaxes so much that it can be cured by the ordinary treatment with bougies or sounds, during the reparation of the wound in the perinæum."—*Mr. South, in note to Translation of Celsus*, Vol. II., p. 436.

of pus and extravasated urine. In such cases nothing is wanting to relieve the bladder but to deepen this incision into the urethra itself — a proceeding surely both milder and more obvious than if, after cutting deeply into the perinæum for pus and extravasated urine, one were to start *de novo* with a trocar, to tap the bladder by the rectum or above the pubes.

(To be concluded next week.)

ORIGINAL COMMUNICATIONS.

EXAMINATIONS OF THE EFFECTS PRODUCED BY CERTAIN MEDICINES.

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ANTIMONY.

October 9.—Kitten dosed with ¼ and afterwards ½ grain of tartar emetic. She was violently sick, vomited a clear mucus fluid, of acid re-action, with portions of half-digested food; was killed soon after. The liver was of buff yellow colour; the gall-bladder moderately full of healthy-looking bile. The stomach was pale, and empty; there was some bilious-looking fluid near the pylorus and in the duodenum, but none in the small intestine; the contents of the large intestine were fluid; and the whole intestinal tract, so far as it was examined, appeared to be the seat of mucous and watery exudation.

Liver presents, on minute examination, nothing peculiar; the parenchyma consists of cells, nuclei, delicate vesicles, with abundant granulons and oily matter. These are all massed together; there is no appearance of linear arrangement, nor is the oily matter more abundant in one part than another; the chief part of it, by far, is free; that is, not contained in the cells. Stomach presents nothing remarkable; the surface is covered by its columnar epithelium attached. The contents of the tubuli were natural; portions of their epithelium were seen exuding in masses from the fossulæ enveloped in a tenacious mucous matter. So defined were these masses, and so sharp their edges, that I fancied at first they were closed sacs belonging to the sub-mucous tissue, which had become displaced. The epithelium of the small intestine, even after 24 hours, remained pretty perfectly attached. Spleen contained only a little diffused granular yellow pigment. Kidneys of ordinary aspect and condition. Pancreas—the epithelium appears stiff, and contains throughout small clustered groups of oily molecules; it was completely dissolved by liquor potassæ. There was a small red mass inclosed in the same capsule as the pancreas, and quite seeming to belong to it, which, from its aspect and structure, I believed to be spleen—a small "lien succenturiatus." Lungs—the epithelial particles were prodigiously developed in some parts, less so in others; they were granulous, distinctly nucleated, perfectly formed: there were not many glomeruli.

Oct. 10.—Cat dosed at intervals of an hour and a-half with about ½ gr. of tartar emetic. She was made very sick; bowels relaxed, stools clayey and loose after the first dose; after the second, she forced her way out of a hamper in which she was confined, and was found dead in the morning, the last dose having been given at 11 p.m. On dissection there was found great congestion of the large veins of the right side of the heart, and of the pulmonary artery and its divisions; they were full of black blood; the left side of the heart was well contracted, and contained some dark blood. The lungs were of a light red.

Œsophagus—the mucous lining was faintly reddened; just above the cardiac orifice of the stomach the canal was somewhat distended by a large mass of small worms (Tricocephalus dispar). The mucous lining of the stomach was pale, empty, covered with mucous and watery exudation, and in some parts by a bright yellow bilious fluid. The duodenum showed its villi near the pylorus, somewhat injected, and the mucous surface throughout for about four inches was covered with a deeply bile-tinged mucous fluid. Proceeding down the small intestine, the same deeply bile-tinged mucous fluid was found for about eighteen inches, or about two feet, reckoning from the pylorus; the surface from thence down to the ileo-cœcal valve, was covered with an abundant pale watery mucous flocculent material; the amount of watery and mucous exudation was considerable. The large intestine contained some pale fluid fæcal matter, but not the watery and mucous exudations of the smaller. The columnar epithelium of the stomach was shed, and lay in a mucous fluid; the tubes appeared as usual. In the upper part of the duodenum, the villi presented their capillary plexuses considerably injected, just at the apex and along the margin of each villus; the epithelial investment was lifted off by an abundant fluid homogeneous and granular exudation, which contained numerous rather large mucous corpuscles. There appeared no particular alteration in the villi themselves, nor was there anything particularly observable in the Lieberkühn follicles. Lower down in the small intestine, where the bile flow had also extended, the condition of the villi was very much the same; there was, however, perhaps a rather less quantity of exudation. In some of the larger vessels running up to the capillary plexus, or perhaps returning from it as veins, there were a few very distinct white corpuscles, contrasting well with the red mass of the blood globules. In several of the injected loops of the villi separate blood globules were distinguishable; in others they appeared fused together. The exudation covering the mucous surface consisted of multitudes of mucous globules held together in a homogeneous tenacious fluid, with very much granular and oily-looking matter; it contained also debris of epithelium. Larynx—healthy; bronchi—the main divisions pale; lungs—the epithelium is greatly increased, the surface of the homogeneous membrane of the air cavities is covered by a granulous and oily matter, which seems to result from the breaking up of epitheliai particles. These particles are extremely numerous, often contain oil or refracting molecules, and, together with the granulous debris, seem quite to clog and partially choke up the aërating surface. There are also seen in the pulmonary tissue numerous rhomboidal, oblong, and staff-shaped particles, similar to those which were found in the spleen. Liver rather congested; gall-bladder full of bright yellow bile, quite gelatinous and tenacious; it contains a great deal of oily matter in the form of free oil drops and masses, as well as epithelial debris and granular matter. All the larger ducts are full of similar matter; it seems clear that all these mucous surfaces have been throwing off immense quantities of mucus. The parenchyma consists of very perfect cells containing much oily matter, especially those forming the marginal zone, which are full of large oil drops; the cells quite on the margin are seen dehiscing, and allowing their oily contents to escape into the "fissure." Nowhere is there seen any biliary tint. The ducts are quite natural; their nuclei towards their termination seem to be rather widely espaces. Pancreas—the epithelium looks rather stiff and bulky, and contains a great deal of oily matter in the form of largish groups of oil molecules; one of these groups lies in each vesicular cavity. Kidney rather congested, the cortical tubuli extremely loaded with large oil drops, the medullary quite free. Spleen presents some deposits of yellow pigment masses; throughout its pulp there are diffused multitudes of dark red minute particles, smaller than blood-globules, but probably derived from them. They are often square or rhomboidal, with sharp angles; often also oblong, occasionally ovoid, oval or triangular; they dissolve immediately in diluted liquor potassæ, losing at the moment their angular shape, and becoming spherical. They seem to have replaced the ordinary blood-globules, which are fewer than usual, though the spleen is large, and appears gorged. After treating a section with liq. potass., the yellow pigment masses remain unaltered, some groups of oily molecules however become visible, dispersed through the tissue here and there. In the liver these square, rhomboidal, and staff-shaped corpuscles were tolerably numerous. In blood from a superficial renal vein, the staff-shaped corpuscles were numerous, the square and rhomboidal rare. Mingled with them in the lungs, spleen, liver, and kidneys, or rather in the blood contained in the vessels of these parts, were very numerous glistening particles, which I should suppose were derived from altered blood.

November 13.—Dog dosed for three days with ant. pot. tart., gr. ⅛ three times a day. He was sick and purged for two days, less so the third; the motions were of a pale clayey colour and contained much mucus, but no biliary matter apparently. He was killed by a blow on the head. The stomach contained a good deal of half-digested food; was

large, and its walls relaxed; its mucous surface in some parts pale, in others reddened by vascular injection. A vertical section shows the tubes perfectly natural, full of normal epithelium, and the columnar epithelium of the surface remaining attached. The re-action of the membrane was acid. Duodenum—surface reddened by vascular injection, and covered with thickish grey mucus; the villi are for the most part bare, some however clad by their epithelium; their vascular plexus is injected at their margins. The Lieberkühn follicles are well seen, and are perfectly natural. The re-action to litmus paper here was neutral. Middle of small intestines—the surface is covered with whitish mucus; the villi are remarkably injected at their apices; they are, for the most part of their extent, unclad by epithelium, which seems to have been lifted off by exuding fluid. The Lieberkühn follicles are natural. Lower part of small intestine covered with a bright yellow, watery, somewhat frothy fluid. The villi are here more injected than anywhere else, and always remarkably along the margins. Their epithelium is lifted off by abundant exudations. The Lieberkühn follicles are natural. The yellow matter consists of epithelial debris and fluid mucus, containing numerous fragments, apparently of muscular fibre, which alone are the seat of the yellow colour. Large intestine contained loose but healthy-looking fæcal matter. Lieberkühn follicles natural.

Liver very full of blood, gall-bladder contained a good quantity of pale yellow bile. The hepatic cells are pale granulous bodies, contain scarce any oil, and no trace of bile; there is no oily accumulation anywhere. The ducts contain some oil in their interior, but not enough to mark their course well out. Blood of the portal-vein contains an unusual number of white corpuscles, many of which refract very much as oily matter does. Blood from hepatic vein, at its entrance into vena cava contains certainly far fewer white corpuscles. Kidney presents nothing remarkable. Lungs—the epithelium is more than usually developed, and very many of the particles contain oil; the oil-laden granule-cells are numerous, in some parts very large and aggregated together. Spleen—The nuclei show traces of further development; there are some yellow corpuscles; several of these are $\frac{1}{3000}$—$\frac{1}{2000}$ in diameter; they are oval or ovoid, with well-defined contour or envelope, and do not appear to result from the fusion of several blood globules together. None of the crystals observed in the spleen and other organs in the last instance were seen in this.

Dr. Pereira describes tartar emetic as having the effect, when taken in small doses, of increasing the secretion and exhalation of the gastro-enteritic membrane and of the liver and pancreas. It also, he states, acts powerfully on other emunctories,—the sudoriparous and renal glands, and the mucous membranes, especially the aërian. Larger doses, he says, cause vomiting and purging, and pain in the epigastric region; they produce redness of the gastro-intestinal mucous membrane, and relaxation of the tissues, especially the muscular. These effects of antimony, which are familiar to our daily experience, are very much the same as those observed in the experiments above narrated, and, though such confirmation be quite unnecessary, yet the microscopic examination of the various tissues under the action of the drug is not, I hope, altogether valueless.

It shows—

1. That a dose of tartarised antimony, producing a decided emetic effect, does not cause any vascular injection or reddening of the mucous membrane of the stomach, though smaller repeated doses produce this in a slight degree. This is not unsatisfactory to be assured of. The gastric tubuli were apparently little affected by large or small doses, and were full of their ordinary contents. The columnar epithelium of the surface was shed in the instance in which the stomach contained much mucous and watery exudation; in the other two instances it remained attached.

2. The small intestine in all the three cases was covered on its internal surface with a rather abundant watery and mucous exudation; the capillary plexus of the villi was injected, and the epithelium in the two cases where the system was most affected actually raised and detached from the subjacent basement membrane by exuding fluid. This could not have depended on mere local irritation occasioned by the antimony; it must have been the result of a special affinity of the salt for the part affected as a surface of elimination, otherwise the stomach would have been at least equally affected. The Lieberkühn follicles are mentioned as quite natural. This, perhaps, may excite some surprise, as it was to be expected that they would have shown some evidence of having been actively engaged in pouring out mucous fluid. I certainly conceive that they had been so doing, but think that the condition of their epithelial lining, consisting as it does of nuclei imbedded in a granulous substance, and not of complete cell-particles, may well account for the absence of traces of energetic action; for the granulous matter doubtless dissolves quickly into the secretion of the follicle, and passes out at the orifice, while the nuclei still remain *in situ*, and attract fresh plasma to solidify into granulous matter round them, which again liquefies into the secretion as before.

3. The large intestine was decidedly less affected than the small; it did not appear to be the seat of vascular injection, or at least to no great extent, and contained much less of the watery and mucous exudation.

4. There was nothing observed in the condition of the pancreas to show that it had been secreting more actively than usual,—its epithelium was in a condition which rather conveyed the idea of tardy action; that is to say, it did not appear soft, delicate, and easily disintegrable, but in rather an opposite state.

5. The liver does not seem to have been affected, as far as regards its parenchyma; the cells in every case were natural, and did not appear to contain bile. The quantity of oil varied, but not beyond ordinary physiological limits. The quantity of mucus secreted by the mucous lining of the larger ducts was, at least in one case, greatly increased, so much so that it seemed to render the bile unduly viscous, and less apt to flow out into the intestine. A considerable flow of bile had, however, taken place in this instance, and to some extent in the two others; but, compared with some other agents, the chologogue power of antimony does not appear very considerable. Probably there are considerable individual differences in this respect. The kidneys showed no noticeable alteration.

6. The spleen in two instances presented nothing particular, but in one there were observed in it, as well as in other organs, those remarkable crystalline bodies which have been described. It seems certain that these were contained in the blood, as they were found in this fluid and in several different organs; this is further confirmed by their reddish colour, which, as well as other circumstances, suggest that they were derived from the red globules; the form of these bodies being perhaps altered by the presence of the antimonial salt in the liq. sanguinis. I have never seen similar crystalline particles in any other animal that I have examined; and, though they were not observed in the two other cases, I still am strongly inclined to believe that their production depended on the agency of the antimony, and that their occurrence was not accidental.

7. The increase which the ordinarily scanty epithelium of the aërating pulmonary surface had undergone was very remarkable, and appears to me a circumstance that deserves to be taken into account in considering how antimonial preparations act in reducing pulmonary inflammations. It is known that dyspnœa mainly depends on a disproportion, arising between the quantity of blood to be aërated, and the extent of the aërating surface; if both are diminished pretty equally, dyspnœa is not felt, as in phthisis; if the latter is suddenly diminished, or the former greatly increased, as in asphyxia, and the engorgement stage of pneumonia, the dyspnœa is extreme. Now, one effect of antimony clearly is to increase the amount of secretion or exudation from a given surface, generally from all mucous surfaces, and, in so doing, it will certainly relieve and diminish the congestion of the capillaries which supply that surface; the exuded fluid passes into a variety of imperfect cell-forms, more or less resembling those which constitute the normal epithelium, and is more easily expectorated than solid coagulated fibrinous matter. I have no absolute proof that antimony has the power of diminishing the quantity of fibrine in the blood, but am much inclined to believe this to be the case. Dr. Böcker states, as the result of his experiments, that it causes a waste of the constituents of the blood, especially of the globules.

On a subsequent occasion, I hope to give some account of the effects observed after the administration of other medicines.

1, Southwick-place, Hyde-park.

CASE OF ARTIFICIAL ANUS.

By Drs. LESLIE and PENNELL, of Rio Janeiro.

On Thursday, the 19th of August, 1851, we were called to see a mulatto child who had been born without an anus.

Since birth it had refused to take the breast, and had latterly continued to vomit a yellow, bilious-looking fluid.

On examining the spot where the anus ought to be, the finger readily pushed the skin before it into a circular cavity, apparently muscular. It was, therefore, supposed that, upon dividing the skin and some cellular tissue, the bowel would be opened. Guided by the finger, the whole track where the rectum ought to be was divided as far as the brim of the pelvis, but no intestine was discovered.

The child's symptoms not being urgent, it was determined to leave things as they were until the following day. We introduced a large tent into the wound, hoping that possibly the discharge from the wound might give some evidence that the bowel had been opened.

The next day, when we saw the patient, there were no signs of meconium, so we determined to make an opening into the descending colon, where it was uncovered by peritonæum. The operation was commenced by an incision made along the outer edges of the mass of muscles, extending from the last rib to the crest of the ilium. The muscles and several layers of fascia having been divided, a smooth, intestinal-like body made its appearance. It had upon it ramifications of vessels very much like those on the bowels. Upon making an incision into it, it was found to be fat. Together with some similar masses, it was cleared away, and the kidney was exposed, occupying nearly the whole extent of the wound, and reaching almost as low down as the crest of the ilium.

It was found so embarrassing, that another incision, an inch and a half long, was made parallel to the crest of the ilium, and perpendicular to the former incision. Upon clearing the space thus exposed, and pushing up the kidney, the bowel, or what was supposed to be the bowel, was seen at the bottom of a very deep and narrow wound. A rough-pointed instrument was drawn across it, and a distinct tympanitic sound was elicited, proving the existence of intestine. A fold of it was raised in a pair of forceps, and, while it was being punctured, a strong jet of blood was thrown up. The wound was instantly filled with a sponge, which was kept there for half an hour. Upon removing it, the intestine was again seen. Another similar attempt was made to open, but another jet of blood so soon filled the wound, that the sponge plug was again introduced. As the child was much exhausted, and the general symptoms were not very urgent, further proceedings were again postponed until the following day.

The next day the vomiting continued, and the child had not taken the breast. The sponge was withdrawn, and the intestine was again apparent. It was pinched up and opened, and a large quantity of gas and meconium escaped.

The opening into the intestine was then enlarged with a scissors. A similar gush of blood to those which happened before took place, and threatened the child's life. It was blanched, and the extremities were cold. The wound was again plugged.

The next day the patient was found pretty well. In a few hours after the intestine was opened the child recovered from its depression; it took the breast, and the vomiting ceased. A yellow fæculent fluid, mixed with curded milk, flows freely from the wound. Several unsuccessful attempts were made to establish the natural passage.

It was hoped that a soft bougie, passed down the bowel through the upper wound might be felt by the finger introduced in the lower, but we could not feel its extremity.

30th.—The patient in much the same state as yesterday, though he takes the breast freely and well. The evacuations, too, are healthy. The kidney protrudes very much, occupying nearly the whole extent of the wound. From under its lower margin the fæces escape.

Sept. 3.—The child gradually sank and died.

4th.—The abdomen was laid open. The peritonæum was generally inflamed, and about three ounces of semi-purulent fluid was effused into the cavity.

The bowels were natural down to the sigmoid flexure of the colon. At the part opened the intestine was somewhat contracted, and immediately afterwards it was suddenly expanded into a large pouch, which again soon tapered to a point, and was impervious. The peritonæum was uninjured by the operation. No blood vessel was discovered to account for the hæmorrhage which happened during the operation.

The incision from below had reached beyond the extremity of the cul de sac, but it was behind it.

Rio de Janeiro.

THE SIMABA CEDRON, AND ITS PREPARATIONS IN GOUT.

By J. B. THOMPSON, M.D.

In offering these few remarks to the Profession, preparatory to the publication of some cases of gout and other affections in which the stomach and liver are chiefly engaged, or supposed generally so to be, I think it necessary to mention that, in cases of pure gout, I have invariably observed that any preparations of mercury administered before or during the fit have always been attended with an aggravation of the local and general symptoms, and, that the secretions were not by any means improved; and, taking the tongue as a criterion, they were decidedly deranged rather than otherwise by a mercurial; whereas, if taraxacum or its preparations (either the extract or liquor) were given as a substitute for the mercury, the state of the tongue and the secretions were greatly improved.

In cases where colchicum has been administered, an objection to its continued employment is the frequent headache attendant on its use, and, where this does not occur, the bowels are often deranged and a bilious diarrhœa induced, by which the headache, if present, is removed; but one or both so frequently occur, and especially in private practice, that many patients refuse to take colchicum at all. There is another point of great moment to the Profession, and that is as relates to the quality of medicines furnished at different establishments, namely, that the same prescription taken to different chemists' shops will not have the same effect: in one case you find your remedy produce the desired effect, and in another instance you find no effect at all, or one of a very disagreeable character to the patient and the physician, and this must be so as long as our Materia Medica consists of remedies varying in marketable price from 2*l.* to 6d., and the chemist is at liberty to give you either.

By this remark I by no means wish to convey to the Profession the idea that prescriptions are unfairly dealt with, but that the Profession and the public are open to injustice being practised somewhere; and if a medical man recommends his prescription to be sent to an establishment where he expects to get the genuine article, he is then open to the charge of there being some private understanding between himself and the chemist; or, if sent to be made up by a general practitioner, who may be an interested party in the case, here, again, there are objections. To obviate the former, it is proposed to recommend to the Government to appoint a medical inspector of all establishments, whose sole and special duty it shall be to report on the genuine quality of the drugs, etc.

In returning to the subject of these few remarks, I will only here solicit the attention of the Profession to the use of the simaba cedron, and its preparations in affections where colchicum is and may be employed. My own experience of its employment is satisfactory, and I think it does possess advantages in many cases where colchicum (from the reasons already stated) is objectionable. Mr. Squire has kindly prepared the tincture and acetum simabæ cedron for me, and I have been trying these remedies, with great advantage in some cases, and I am just now trying it in the case of a gentleman of high rank—a great martyr to gout. In this case I have had the advantage of the opinion and co-operation of Dr. Ferguson. The cases will shortly be furnished you for your Journal, and I hope to satisfy the Profession that by the more frequent employment of taraxacum as a substitute for any mercurial in these affections, much more success will attend the use of colchicum; but still more so the substitution of simaba cedron, as employed by me, and as Mr. Squire will inform any member of the Profession who chooses to test this remedy. I recommend the liquor taraxaci as follows:—A dessert-spoonful two or three times a day in some Seltzer water. By this means the disagreeable effects of the colchicum are obviated, and its efficacy promoted, as also that of the "acetum" or "tincture" of the simaba cedron seeds. This

latter remedy has been long known as a specific in intermittent fevers. In cases of gout I think it is quite a mistake to make any great change in the diet at the time of the attack. Excesses at any time are objectionable, and may bring on a fit; but I question much if too low a regimen is not equally objectionable. Indeed, in a case now under my care, the party —heretofore a great advocate for small doses and homœopathy—admits that he was brought to death's door by the infinitesimal mode of treatment in diet as well as medical globules. This remedy is also used with advantage as an endermic agent.

5, Suffolk-place, Pall-mall.

NEW METHOD OF TREATING GONORRHŒA.

By JOHN L. MILTON, Esq., M.R.C.S.

"Nissuna infermita fra le molte, che alla misera humanità rendono molesta la vita, esercito mai tanto la mente dei professori dell' arte di medicare quanto quella che dal fonte dei venerei diletti trasse l'origine ed il nome."—*Perenotti di Cigliano.*

"Die Gicht und die Lustseuche vielleicht ausgenommen, wird es keine Krankheit mehr gehen, gegen welche eine solche Menge von Arzneimitteln empfohlen und angewendet wurde, als beim tripper."—*Eisenmann.*

INTRODUCTORY REMARKS.—DIVISION OF REMEDIES NOW IN USE INTO (a) INTERNAL REMEDIES; (b) EXTERNAL APPLICATIONS; (c) DIRECT APPLICATIONS.—PROPOSED PLAN OF TREATMENT.

Introductory Remarks.—I shall not touch upon the history of gonorrhœa, having nothing to add to what has already been written. No one has yet come forward with such a mass of evidence as to settle the question, at least satisfactorily to the bulk of readers, of the antiquity or newness of the disease; and to offer anything additional, except with a view of ending for ever the difference of opinion now prevalent, could only tend to render the confusion and doubt more thoroughly irremediable.

In a spirit of genuine hostility to the prevailing fashion, I have not said one word respecting the symptoms, as they have already been amply treated of, even before the present generation of surgeons appeared on the stage; and, were all other works to perish by one of those accidents which from time to time convulse society, Hunter's unequalled monograph would always supply a chapter of symptoms, on which it would be impossible to improve. In that magnificent work, a want of finish may sometimes offend the eye, but the outline is sketched with a master hand, and the colouring is ever vigorous and full of harmony. Yet how often are we still to be told, that "by gonorrhœa is understood an inflammatory affection of the urethra," and that "the first symptoms of the disease consist in itching, redness, and swelling of the orifice of the urethra?"

The pathology, our knowledge of the causes and nature of this disease, may wait centuries for the advent of another Ricord. The discovery of truth will hardly be promoted by interesting anecdotes often related by the patient for the sole purpose of deceiving the surgeon, or to gratify that taste for the marvellous and delusive which is innate in the minds of most men, and irresistibly impels some to sacrifice sober truths to display.

Treatment, then, which appears to me the great object after which we ought to seek, is the main subject of consideration in this paper, given out now as a body, to which may be attached the scattered members published at intervals in the *Medical Times*,—each possessed of independent vitality, but wanting the completeness which springs from the presence of the parent trunk.

This great want has been but slowly met, notwithstanding the publication of so many hundred works on the venereal disease.(a) Among the "authorities," scarcely two are to be found who treat the disease alike; and this disunion has naturally extended itself to those who look to the heads of the Profession as oracular sources whence they may imbibe true inspiration.

Of the vast variety of injections, how many have held their ground? How many plans of treatment have arisen, and flourished only to decay? (b) Patients have been half scalded in hot baths; the penis has been almost frozen with cold lotions; nay, the patient has been enjoined not to make water in the streets lest the penis might take cold, and yet told in the same breath to keep himself cool. Purgatives and diuretics, astringents and laxatives, stimulants and sedatives, expectorants, demulcents, and alexipharmics have all been tried in turn—all, at times, only to yield disappointment. Iodine and mercury have of course not been forgotten, and not only have different actions been excited, with a view of curing the disease, but different means of exciting the same action have been resorted to, even by those who saw the action, when induced, fail in effecting a cure. Medicines have been vaunted as specifics, though no specific exists for any disease of the mucous membranes. Injections have been used, now homœopathically dilute, and, again, of a strength only calculated to produce the most deleterious effects.(a)

A history of the *treatment* of gonorrhœa would not only be amusing but instructive; I know not if such a work exists. It would show us what means of cure have been tried, and what have been overlooked and ignored; thus preserving us from the errors into which the old surgeons fell, chiefly from the want of those beacons which guide our path. Perhaps, too, it might in some measure tend to check that tendency to regard ourselves as superior to our forefathers,—one of those flattering delusions into which our insatiable and restless vanity is so prone to lead us, as if man ever progressed! As an individual he may, as the type of the race never,—no, not one step further than those inferior animals he so cruelly abuses; his greatest efforts scarcely preserve him from falling back.

A hundred and fifty years ago, when a man was infected with gonorrhœa, he adjourned to some coffee-house, and sent secretly for his surgeon, who undertook to cure him for some good round sum. And he kept his word; by rough means, it is true, as "blooding and purging," with the use of some messes which cast our most complicated medicines into the shade.(b) But he cured the patient, often with a rapidity we should have some difficulty in surpassing, and the grateful patient celebrated the doctor's skill in couplets worthy of the age.

Three-fourths of a century after, we find the first surgeon in the world (c) questioning the fact that medicine has any power over this disease in perhaps more than one case in ten. Had treatment really retrograded in his day?

I deal not with the past but with the present. The time for the rude treatment which suggested such doubts to the mind of Hunter has passed away; the advances made in medicine, and some fields of investigation necessary but subordinate to it, have made us acquainted with the properties of many substances unknown to the surgeons of a past age. Besides, it is a positive wrong to seek to dim the glory of illustrious men, and open their works merely to cavil at what would now appear gross ignorance and prejudice,—defects for which they cannot in justice be blamed, even as the absence of them cannot be looked on as a merit of modern writers, man being in such things the creature and child of the age he lives in. There are laurels enough to win in untrodden fields without our seeking to wrest them from those to whom we owe so much.

Division of the Means of Treatment now in Use.—At one time I purposed examining the various plans of treatment adopted in gonorrhœa, but I found it impossible to carry out this idea; for, as many of these plans are exactly alike in great part of their details, and only distinguishable by the use or rejection of some particular remedy, the same arguments would require to be urged again every time the separate divisions of treatment came to be canvassed, thus leading to excessive confusion and repetition. I shall therefore confine myself to an examination of each separate remedy, except in respect to two systems, each of which appears unique and complete of itself.

The first of these is the expectant plan, which consists in doing nothing for the disease. A few years of observation would, one might think, suffice to convince any one of the

(a) At the close of the seventeenth century, 400 works had appeared. The classed catalogue in the College of Surgeons mentions nearly a quarter of a thousand, some of which have gone through three or four editions.

(b) Questo immense serie di medicamenti dimostra che ancora non si è trovatto quello, che in preferenza di tutti gli altri, possa estinguere senza conse quenza lo scolo gonoroico. Dom. Cirillo. P. 185.

(a) Such as those of chloroform given by Venot; ether injections; the strong injections pushed to the prostatic part of the urethra, by Debeney and Gueterbock, which caused fainting and two or three hours agony!

(b) e. g. ℞ Nucis Avellan. excort. ℥iv., magister perlar., laudan. Lond., aa ℈j., ferræ sigill. bal veri. sang. draeon., aa ℈ij., sem. plant., rasuræ Ebor, aa ℈iij., nucis mosch., No. iii. vel iv., cinnam. ℥i., sacch. ℥iij., syr. Cydon. q. s. s. Martin—A Treatise on the Venereal Disease, p. 407.

(c) John Hunter on the Venereal Disease, 1788.

inutility of this system, which, I was astonished to learn, is still pursued; for certainly the ordinary treatment, powerless as it is in many instances, will cure the disease in a fraction of the time it would require to wear itself out. (a) But there is this consolation for the lovers of orthodox surgery, that those who adopt such a method are not likely to find many converts among their private patients. There are men, it is true, who systematically contemn all treatment, but they seldom go to the surgeon, and are, indeed, better away.

I have only been able to collect about a dozen cases in which this system was tried, at least where the exact date of the first appearance and final disappearance of the disease could be accurately ascertained. Here the length of time the gonorrhœa had lasted was from six weeks to as many years, whereas a dozen cases taken at random, treated by any of the ordinary formulæ, gave a period ranging from one week to two or three months, though in certain cases enduring much longer. But, in respect to the first class, it should be remarked, on the one hand, that the patients were mostly dissipated or refractory persons, ill calculated for giving fair play to any line of treatment; and, on the other, that in some of the long cases the run of the disease was finally cut short by having recourse to a surgeon, otherwise it might have endured for life. The cure of a disease which had lasted such a length of time is in itself one of the strongest proofs that could be adduced against the expectant treatment.

Again; leaving the disease to wear itself out is not unfrequently followed by stricture, and other organic changes in the urethra. Nay, there is reason to believe that a tendency to this takes place so soon as the phenomena of the disease develop themselves. As Jesse Foot says, "that a gonorrhœa may cease to be a gonorrhœa if left alone to its own action, may be true; but it may also be as true that it might not cease to be a gonorrhœa till it had reduced the organism within the urethra to a condition that could not afterwards be restored to a sound state." There are certainly grave doubts as to gonorrhœa being the cause of stricture; thus Hunter considered the idea founded on prejudice, and other surgeons have held nearly similar opinions; but cases are constantly met with in which we are compelled to admit that it at least appears to hasten its development. It is the frequent appearance of a stricture during or after a neglected gonorrhœa that is so ominous.

My own attempts to arrive at anything like a satisfactory conclusion on this point have utterly failed. After examining a great number of cases, and learning the minutest details, I come to the conviction, that the mere history of the origin of the stricture, as given by the patient, can only go a short way towards determining the question. To solve this we want a series of examinations of the urethra after death, not only in persons who have suffered under stricture and gonorrhœa, but also in those who have never had either. For this reason I shall withhold the details on which the following conclusions, which seemed all that the mere history of the cases could warrant, were founded.

1. That strictures arise in persons who have never had a gonorrhœa, and in some at such an early age as to preclude all probability of gonorrhœal infection.

2. That occlusions of a similar character occur in other mucous passages without being preceded by any inflammatory and purulent discharge.

3. That discharges of a nature and appearance very similar to clap will come on in those suffering from stricture, even after intercourse with a chaste female; thus rendering it difficult to say, on mere examination, whether the discharge be really gonorrhœa or not. In fact, I suppose most surgeons must have seen cases reported as severe clap and swollen testis which proved, on examination, to be strictures.

4. That the progress of the stricture seems to bear no sort of proportion to the duration or severity of the gonorrhœa; or, if it do, that the proportion is not yet ascertained.

5. That the proportion of patients suffering under stricture to those suffering under gonorrhœa is extremely small. And, moreover, that as the one is an enduring, and the other a fleeting malady, the proportion which stricture cases bear to those of gonorrhœa becomes much further diminished.

6. That it is probable that strictures spring up spontaneously, but may be greatly aggravated or developed by prolonged clap.

The second of these plans is the homœopathic; one of those miserable exhibitions of buffoonery by which men attempt to gain a position they could never honestly attain to; a wretched cheat and delusion fitted only for the brains of a Bedlamite or a knave. Need I say, that as a remedy, it is as worthless as its projectors and patrons? I hasten to pass from the contemplation of such humiliating folly to examine what means true surgery offers for the cure of gonorrhœa.

For this purpose the simplest and most comprehensive division appears to be that into internal remedies, external applications, and direct applications.

(*a*) *Internal Remedies.*—Perhaps, without exception, the most potent and universally used of these is copaiba, as nauseous and disgusting a drug as ever was administered. No effectual method of disguising its taste has as yet been discovered; and this, with some patients, forms an insuperable obstacle to its use. Besides, it gives rise with some to nausea, or even retching and vomiting, almost every time it is taken; others suffer under griping and purging; and in a third class it produces dyspepsia, and the most distressing irritability of the stomach. The disgust produced by its prolonged use often so exasperates the patient as to make him neglect all treatment, or even aggravate the disorder by some sudden act of imprudence; to have recourse to dangerous remedies, as excessively strong injections, attempts to overwhelm the disease, as it were, in a debauch; or to plunge into the yawning jaws of some advertising shark.

Many patients also complain of its imparting its odour to the breath, thus becoming at one and the same time a source of annoyance and the means of revealing what they are most anxious to keep secret—for its smell and properties are widely known. When to this we add, that it is by no means infallible, even when used to the extent of ℥ss per dose, (a) or when its action is promoted by using it in the form of injections, enemata, (b) suppositories, (c) etc., we may, I think, conclude that, to use a mild phrase, its employment is not free from objection. I am at the same time far from denying its efficacy in many cases; but how far are we able to say what these cases are—what symptoms they present? When we can answer these questions, the use of copaiba will become much more limited; but it will, perhaps, always effect a cure.

As far as I can, I shall adduce cases in support of what I advance, premising that my limits compel me to restrict the number.

Case 1.—J. D., mild gonorrhœa of three months' standing. Treated with copaiba and injections of sulphate of zinc and nitrate of silver. Afterwards bitters and salines. At the end of seventy-seven days not quite cured.

Case 2.—W. J., gonorrhœa of three or four days' standing. Ant. pot.-tart., copaiba, turpentine, and steel. At the end of eighty-six days left off attending, not cured.

Case 3.—Of three days' standing. Pulv. salin. At the end of fourteen days, copaiba and turpentine, followed by colchicum. On the fifty-ninth day, there was still some purulent running. Six days later he was cured.

Case 4.—J. S., had been treated seven months with copaiba, sulphate of magnesia, etc. There was still gleet, cloudy urine, and pain over the region of the bladder.

Case 5.—L. H., gonorrhœa of a month's standing, for fourteen days of which he had used injections and purgatives. Treated for seven days with saline powder and injections of sulphate of zinc; then with copaiba and turpentine; the injection being continued, as also the pulv. salin. to open the bowels. Cure in fifty-two days.

I have seen so many instances in which copaiba was used for very long periods, as six or nine months, aided by aperients, injections, abstinence, etc., and yet not effecting a cure, that it was impossible to shut out the conviction of its possessing no power over these cases, which were nothing more than simple clap. For the sake of brevity, I will only allude to one. The patient took ℥iss. of copaiba and sweet spirits of nitre regularly every week, for the space of a year, and was ultimately cured by a few injections properly given.

(a) The *Edinburgh Medical and Surgical Journal*, for April, 1818, gives a table of 55 cases treated in different ways:—15 by fasting and quiet, cured in 2 to 23 days; 8 by cubebs, in 4 to 6 days; 4 by camphor, in 5 to 14 days; 8 by capsicum in 8 to 24 days; 20 by injections of lapis. infern. ℈i., ad. ℥i., cured in 3 to 42 days. But, with the exception of cubebs, this is only a comparison between bad and expectant treatment.

(a) Cadet's astringent emulsion consisted of balsam copaiba, syr. tolut., aa. ℥j., aq. ros. rub. ℥vj., gummi mimosæ, spir. ether. nit., aa. ℥j. M.; one half at night and the other next morning.

(b) Velpeau. (c) Ricord.

It will, perhaps, be said, that in these cases it was given injudiciously, having been begun with at the commencement; but these cases embraced every variety; and if I am to believe what some surgeons have advanced respecting it, (which my own observation entirely confirms,) there is no stage in which it cannot be safely administered.(a) It is very doubtful if it is more usefully given when the phenomena of inflammation have gone. Remedies seem to act most vigorously in the early stages; that which will often cure a gonorrhœa before the end of the first week, may be inert at the end of the first month.

Turpentine is closely allied to copaiba, but less powerful. Like the other, it sometimes gives rise to sickness and nausea; but in ordinary doses, such as are given for gonorrhœa, these symptoms seldom rise to any great height. It is not improbable, that, if used in large quantities, such as are prescribed for worms, it might, in certain instances, at once arrest the discharge; and some authors cite cases in which it has done so.(b) After using it for several months, sometimes along with copaiba and injections, sometimes alone, I was unable to observe any superiority over milder and more agreeable remedies. In a few cases, especially when aided by injections or copaiba, it appeared to assist somewhat in checking gleety discharges. Over others, particularly when used alone, it did not seem to exert the slightest influence. Moreover, to have any great effect, it must be given either to the extent of 8 to 12 pills for a dose, or in a fluid form, as emulsion, when it is almost as repulsive as copaiba—a strong objection to its use.

10, Jewin-street.

[To be continued.]

CASES AND OBSERVATIONS

ILLUSTRATING THE THERAPEUTIC EFFICACY OF

DILUTED HYDROCYANIC ACID

AS A TOPICAL APPLICATION IN CERTAIN

AFFECTIONS OF THE EYE.

By JAMES VOSE SOLOMON, Esq., M.R.C.S.,

Surgeon of the Birmingham Eye Infirmary, late Surgeon to the Birmingham General Dispensary.

[Continued from page 186.]

In my former communication (*Medical Times and Gazette*, Feb. 21) I stated, "It is when the acute stage (of the external ophthalmiæ) has been subdued by appropriate treatment, or in cases where the symptoms of irritation are greater than those of vascular excitement, that the diluted hydrocyanic acid proves to be of singular benefit. A lingering chronic stage, with the liability to relapses, is averted; dimness of vision, intolerance of light, and lachrymation, quickly yield to its calmative powers." It is hardly necessary for me to state, that, when the symptoms of irritation are dependent upon mechanical causes, the acid should not be prescribed.

In the paper referred to, three only of a series of cases were reported; one of which (the first) was intended to illustrate the impropriety of exhibiting the acid in an acute ophthalmia; also its very decided influence in effecting a cure after the exhibition of antiphlogistic treatment. The case was one of catarrho-rheumatic ophthalmia; it was treated for two days antiphlogistically, and upon the two following days by the topical application of diluted hydrocyanic acid; the duration of treatment required for a perfect recovery having been only four days. Simple acute catarrhal ophthalmia very rarely subsides in a less period, whether it be treated by leeches and fomentations, &c., as advised by Lawrence and Tyrrel, or by a solution of nitrate of silver, as recommended by Mackenzie, and now generally practised by the Profession.

I afterwards recorded a case of a similar nature to the last, which had existed sufficiently long for the cornea to become opaque, and the iris probably to have become inflamed. Under these circumstances, I prescribed leeches to the temple, mercury to slight ptyalism; and afterwards quinine. In fourteen days the more acute symptoms had subsided; but the eye remaining irritable, as is common in this disease, a trial of the relative value of vinum opii and hydrocyanic acid was made. The latter afforded decided relief. I have since made use of it in similar cases with the best effect. The fourth case was one of dimness of vision and epiphora consequent upon morbid sensibility in the retina and lachrymal gland, after an attack of acute iritis, which subsided in four or five days under the sedative influence of the prussic acid. I consider that any remedy, whether it be a constitutional or a local one, which has the power of allaying irritation in a diseased organ, is valuable, and that the more early we can subdue irritation in a part which has been inflamed, the less probability will there be of a recurrence of a relapse. I have now for nine years prescribed diluted prussic acid as an eye-drop in ophthalmic affections. My connexion, during the last four years, with the Birmingham Eye Infirmary, in which upwards of 1000 cases come annually under my care, has afforded me a full opportunity of judging its merits.

ACUTE POSTERIOR INTERNAL OPHTHALMIA (?) IRITIS, AND CORNEITIS.

Case 4.—A gentleman, 56 years of age, a native of Hanover, of excellent general health, was ten years ago attacked by acute rheumatism, which gradually merged into the chronic articular form. He got cured of his pains, but has ever since suffered at times from irritation of the right kidney, with a copious deposit of lithates in the urine. He has also been subject for many years to occasional discharges of blood from the lower bowel, which do not at all interfere with his general health.

Upon the 26th of August, 1851, he consulted me for an inflammation of the left eyeball, of which he gave the following history:—"Ten days prior to my coming to you, I noticed, while reading a newspaper, that the letters ran one into another, which obliged me to desist, now and then, for five or fifteen minutes; I had pain in my forehead. These symptoms continued to trouble me for three or four days, upon one of which I could not see at all with the left eye; but the following day the vision returned. The eye was not inflamed, or subjected to any medical treatment. I passed the 20th of August in the country, and was the greater part of the day in the open air; in the evening I experienced a severe shooting pain in the left eyeball; it felt tender to the touch, as if some foreign body was lodged upon it. The sight was quite good. (?)

"21st.—The eye watered, and the lids were swollen.

"22nd.—I could not bear the light.

"23rd.—Vision was seriously impaired.

"24th and 25th.—All the symptoms aggravated."

26th.—*Present State.*—The whole surface of the left cornea is covered by a dew-like opacity; iris green, and does not contract when suddenly exposed to a bright light. (The iris of the right eye is of a pale blue.) The pupil is central, black, and contracted beyond the medium size. Sclerotic pervaded by numerous pink vessels. Some conjunctivitis. No white ring near the corneal margin. Epiphora and photophobia. The eyeball is said to feel as if "squeezed;" there is pain in the left brow. Some relief is obtained by gently compressing the organ with the hand. Vision is very indistinct, so that large objects are with difficulty recognised. Pulse soft; bowels open. Considers himself to be very well, excepting for the eye disease; admits, however, that he has, for the last few weeks, been more than usually troubled by pain in the direction of the right ureter, and that his urine is red and thick.

Treatment.—I directed five grains of blue pill, with an equal quantity of Corbyn's colocynth, to be taken immediately; ten leeches to be applied around the affected eye; three grains of calomel, with twelve of Dover's powder, at bed-time. A wine-glassful of the following mixture to be taken every morning:—℞ Antim. potas.-tart. gr. j., mag. sulph. ʒiv., potas. nit. ʒiss., mist. camph. ʒviij. M. ft. mist. Low diet. To confine himself to a warm room, in which the light is moderated.

27th.—Vision worse; a large looking-glass appears as a black spot. Conjunctiva elevated at the periphery of the cornea, chemosis. The latter membrane, with the iris and the pupil, is as reported yesterday. Take two grains of calomel, with a fourth of a grain of opium, every four hours, and two tablespoonsful of the following mixture at the same time:—℞ Vin. lem. colchici, potas. bicarb. aa. ʒij., sp. æth. nit. ʒiij., mist. camph. ʒviij. M. ft. mist.

(a) Ansiaux, p. 9.

(b) Martin, p. 405, gives from another writer the following prescription. ℞ Tereb. Venet. ʒiij., pulv. rhei ʒj., M. ft. bolus. Sir T. Mayerne gave ʒi. doses with success.

28th.—Vision slightly improved. Conjunctivitis more marked. Pain in the bony orbit relieved. Continue medicines. To be cupped on the temple to ʒviij. (immediately afterwards could distinguish a chair, which was before impossible.) The forehead and temple to be well rubbed with the following tincture every night and morning. ℞ Ext. belladonnæ ʒss., tinct. opii ʒiv. Ft. tinct.

30th.—Vision slightly improved. Pergat.

31st.—Vision as yesterday. Has slept but little; the conjunctiva is very red; slight chemosis; epiphora very troublesome; pulse 80. Apply eight leeches to the temple, and a blister between the shoulder blades. Continue calomel.

September 1.—Eye is more easy, sensation of weight upon it lessened. Pergat.

2nd.—Cornea is more opaque, and the iris more dull. Pulse 100, and somewhat hard. Venæ sectio ad. ʒxii.; extract of belladonna to be rubbed on the brow night and morning.

Vespere.—Pain in the eye relieved, a slight sense of weight only upon the eyeball. Gums unaffected by calomel, which is to be omitted. Take five grains of blue pill three times a day, and two tablespoonsful of the following mixture every fourth hour:—℞ vini lem. colchici, ʒii. et mxi., potass. bicarb. ʒij., aquæ flor. aurantii ad ʒviij. M. ft. mist.

3rd.—Little or no pain in the eye. The blood drawn from the arm yesterday is highly fibrinous, but not buffed. Has not slept. The blister discharges freely. Take five grains of Dover's powder at bed time; and a teacupful of arrow-root, with a dessert-spoonful of brandy in it, immediately; light pudding for dinner; arrow-root in the evening.

4th.—Has slept well; a sense of weight over the eye, the eyelids feel stiff; tongue coated; no mercurial fetor. Chicken-broth and arrow-root for diet.

Vespere.—Pupil dilated by belladonna, the cornea is clearing. Can distinguish my fingers when held before the eye. Pulse 91. and soft. To have a boiled sole for to-morrow's dinner. Repeat Dover's powder at bed time.

5th.—Pulse 80; eye comfortable. Cont. med.

6th.—Cornea is transparent; iris green; pupil dilated, not quite circular, adherent by its lower border to the lens; sclerotic covered by minute straight vessels. Although the day is cloudy the eye is very irritable. Vision is much improved; my features can be discerned at a distance of a yard and a half. Gums slightly tender when compressed, no mercurial fetor. To take some roast chicken for dinner. Admov: empl. lyttæ ponè aurem sinistram.

8th.—Pupil well under the influence of the belladonna, adherent to the lens at its inferior margin. The sclerotic white, with the exception of a faint pink ring around the corneo-sclerotic junction; tongue clean; bowels open. Can discern large objects very well. The pupillary aperture is quite black. ℞ Potass. iodidi gr. xxiv., liq. potassæ ʒii., spt. terebinthinæ rect. ʒiij., mist. mucilag. ʒiij., aquæ menth. pip. fortis ad ʒviii. M., s. cochlearia duo larga ter in dies. ℞ Pulv ipecac. gr. ss, pil. hydrarg. gr. iii., ext. colocynth. co. gr. iss. Ft. pilula, omni nocte sumenda.

11th.—Vision is improving. Bright light continues painful to the affected eye. The kidneys act well; urine clear.

12th.—Went in a close carriage to business for three hours, having promised not to use the eye.

14th.—Hæmorrhage from the bowels copious. Omit the pills. Continue mixture.

15th.—Light continues to be painful to the eye. No lachrymation. A slight sense of pressure on the superior lid. The iris is still green. The sclerotic conjunctiva, near to the margin of the cornea, is of a dusky-red colour.

16th.—Can tell the time of day by his watch. The eye is still painfully affected by bright light. Continue the mixture, the iodide of potassium being diminished to two grains in a dose.

℞ Acid. hydrocyan. ʒss., aquæ dest. ʒi. Ft. guttæ, m. et n. oculo affecto instil.

19th.—The eye is stronger; after the second or third application of the drops it was sensibly stronger. Omit the terebinthinate mixture, and take two grains of quinine in some acidulated infusion of roses three times a day.

24th.—Can bear the light with ease. Considers that the drops have much relieved the affected organ. The pupil is dilated by them. General health good. The quinine "did not agree with him at all;" only took six doses. To omit all medicines, regulating the bowels with castor-oil.

Relapse.—Oct. 3rd.—The sight is growing dim; the sclerotic is pale, and all the other textures of the eyeball apparently healthy. The patient has, contrary to my advice, actively employed his eyes by writing in a bright light.

℞ Potas. iodidi ʒij., sp. terebinth. rect. ʒiij., liq. potas. ʒij., mist. mucilag. ʒiij., aquæ menth. pip. fortis ad ʒviij. M., s. ʒi. ter in dies.

7th.—The dimness of vision is so great, that the letters of a newspaper appear confused. Does not sleep at night; is suffering from mental disquietude. To abstain entirely from every kind of occupation requiring particular attention. A generous diet. Continue mixture.

30th.—Is in good spirits. Can see as far and as clearly with the left eye as with its fellow.

Remarks.—I have given this case more fully than I otherwise should have done, as it presents several features of considerable interest. The symptoms which preceded the catarrho-rheumatic ophthalmia, such as inability to direct the eyes to minute objects for a lengthened period, the loss of vision upon one day, and its recovery upon the following one, clearly denoted a strong predisposition in the posterior internal tunics to assume a diseased action. The patient was obviously disposed to rheumatic seizure, and only required a slight cause to determine the congested organ of vision to inflammatory action. His exposure to the country air upon the 20th of August proved to be sufficient for that purpose, and in the evening of the same day the catarrho-rheumatic ophthalmia manifested itself. I think there is every probability that the posterior internal tunics partook of this inflammation, as the vision grew worse up to a certain period, while the haziness of the cornea, and the aperture of the pupil, at the same time, remained *in statu quo*. This view of the case is further strengthened by the fact, that immediately after the patient was cupped on the 28th inst. he was able to distinguish the form of a chair which before the operation was invisible to him: no immediate improvement could have been effected by the local bleeding in the translucency of the cornea, or upon the condition of the pupillary aperture. My fears of the case ultimately terminating in amaurosis were increased by my inability to induce a decided mercurial action. The efficacy of colchicum and general bleeding in subduing the acute symptoms, and of turpentine in combination with iodide of potassium, etc., at a later period, is in this case well shown. The turpentine was not exhibited until the 13th day of treatment, when the cornea was transparent, the pupil dilated by belladonna, the sclerotic natural, with the exception of a faint pink ring near to its junction with the cornea. Upon the 21st day of treatment, the sympathetic irritation in the lachrymal gland had ceased, and the epiphora subsided. The vision of the patient was sufficiently good to allow him to tell the hour by his watch, yet bright light could not be borne: it produced pain, indicating that the retina was in a state of irritability. Diluted prussic acid (1–2) was now applied twice a day to the conjunctiva, and, after the second or third application, the patient stated that the organ was sensibly stronger. I did not see him again until the expiration of seven days from the first commencement of his using the drops, at which time he bore the light with ease, and his vision was good. I discontinued my attendance. The patient, contrary to my advice, actively employed his eyes by writing in a bright light; and, at the expiration of nine days, was affected with amaurotic symptoms. From this relapse he entirely recovered.

IRRITABLE OPHTHALMIA, FOLLOWING LACERATION OF THE CORNEA, CURED BY DILUTE HYDROCYANIC ACID.

The cicatrisation of extensive lacerations of the cornea is sometimes followed by a subacute form of external ophthalmia, of which intolerance of light and lachrymation are prominent symptoms. They may persist for a length of time, get well, and return again and again: resisting ordinary treatment, the patient is effectually prevented from continuing at his employment.

Case 5.—A carpenter, 40 years of age, of healthy constitution, was brought to me for my opinion, by my neighbour, Mr. Thomas Williams, a surgeon, under the following circumstances:—Two months previously he had received an extensive lacerated wound of his right cornea, which was healed under surgical treatment of a judicious kind. He continued, however, to suffer from repeated attacks of inflammation, attended by distressing intolerance of light and epiphora, for which relapses he had been blistered, and had applied sometimes a solution of nitrate of silver, at others wine of opium, to the affected organ.

The day upon which I saw the case, the cornea was opaque, a few vessels ramified upon it; the iris was adherent to the latter membrane; the conjunctiva of the inferior palpebra, and that of the globe, appeared smooth, and of a uniformly light red hue; there were considerable intolerance of light and epiphora. I suggested to my friend a trial of Scheele's prussic acid, diluted with twice its volume of distilled water, as an eye-drop. It was applied for three or four days every night and morning, when, as the eye had become quite tranquil, the patient resumed his business. He had no relapse afterwards.

[To be continued.]

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

YORK COUNTY HOSPITAL.

By HARVEY B. HOLL, Esq.
Resident Medical Officer.

LEUCOCYTHEMIA.—LIVER AND SPLEEN HYPERTROPHIED.

J. J., a butcher, aged 35, a tall, dark-complexioned, and formerly a very strong man, was admitted into the York County Hospital, April 10, 1851, under Dr. Belcombe. He stated that he had always enjoyed very good health until the preceding November, when he began to experience feelings of languor with loss of strength and flesh. Towards the end of December he was attacked with diarrhœa, which recurred again and again, and about this time some fulness and resistance was discovered in the left hypochondrium. He had never had ague, syphilis, or rheumatism. In February he was admitted into the hospital with a distinct tumour occupying the situation of the spleen, and a very irritable condition of the bowels; but in the course of four or five weeks he was so far relieved by treatment that he returned home. The improvement, however, was very temporary, and in April he again applied for admission. He was now more feeble, and considerably more emaciated than when he left the hospital, pale and cachectic-looking, somewhat sallow, but not anæmic, nor had he the peculiar aspect of malignant disease. He had been troubled with diarrhœa, more or less, ever since, and latterly he had had frequent vomiting, sometimes of sour phlegm, at other times of dark coloured fluid mixed with ingesta. The stomach was exceedingly irritable; he had nausea, loss of appetite, and thirst; a broad, flabby tongue, moist skin, and feeble pulse; his gums were spongy, and easily bled when pressed; his motions watery and highly tinged with bile; urine pale and slightly albuminous. A smooth, solid, movable tumour occupied nearly the whole of the left half of the abdominal cavity, extending from beneath the false ribs to the left inguinal region, and almost as far backwards as the spinal column; its anterior margin corresponded with the median line, and was well defined below, but above it was lost, being in contact with an enlarged liver, the lower edge of which could be felt nearly as low down as the umbilicus and crest of the ilium.

The chief features of the case after admission were profuse perspirations, almost constant diarrhœa, and progressive emaciation. On three separate occasions the patient had epistaxis, but not to any great extent, now and then a little blood was noticed in his stools, but this appeared to have been caused by some hæmorrhoidal tumours seated within the sphincter ani. Towards the last his lower extremities became œdematous. He died two months after admission.

The body was examined thirty-six hours after death. The cavity of the peritonæum contained about four pints of clear yellow serum. The stomach presented nothing abnormal. The spleen was enormously enlarged, very firm, and internally was of a paler colour than usual; its structure was remarkably coarse, and its cut surfaces had a mealy appearance. The liver, nearly twice its natural size, was, like the spleen, very coarse in structure, but otherwise normal in appearance. The kidneys were larger than in health, pale and flabby; their surfaces, when stripped of the investing membrane, were smooth, mottled, and traversed by numerous varicose vessels. The mesenteric glands were slightly enlarged.

Extensive pleuritic adhesions of long standing existed on the right side of the chest. Both lungs were slightly congested posteriorly, but otherwise healthy. The heart was normal; its cavities distended with coagula, which, on the right side, were for the most decolorised. A few specks of atheroma were observed beneath the lining membrane of the aorta immediately above the valves. The mediastinal glands were slightly enlarged.

The blood in the portal vein was fluid, and of a dark brownish colour. The colourless portion of the coagula contained in the right cavities of the heart had a dull dirty-white appearance very unlike an ordinary clot of fibrin; it was very friable, and might have been likened to fibrin holding a vast number of pus globules in its meshes.

Unfortunately the means were not at hand for examining the blood microscopically; but the history of the case, as well as the *post-mortem* appearances, render it in the highest degree probable that the patient laboured under that form of blood-disease so fully described by Dr. Hughes Bennett under the title of Leucocythemia.

ANEURISMAL CAVITY IN THE SUBSTANCE OF THE VENTRICULAR SEPTUM OF THE HEART; SUDDENLY FATAL FROM RUPTURE INTO THE RIGHT AURICLE.

A. P., a groom, aged 30, of intemperate habits, was admitted January 14, 1852, under Dr. Simpson. Eight days previously he had been attacked with rheumatism in all the larger joints. On the fourth day he had pain at the præcordia, increased on inspiration. On the fifth day the pains in the joints left him, and they did not again return. For several months he had been subject to dyspnœa and palpitation of heart on exertion.

On admission there was no remains of any local affection of the joints, and except that his urine was scanty and loaded with lithates, there was nothing indicative of a recent rheumatic attack. He had dyspnœa, but not so urgent as to prevent him from lying low in bed. A double murmur, intensely loud, was heard over the whole anterior part of the chest; it had the character of an exocardial murmur, more exaggerated and more diffused than usual. The heart's impulse was somewhat increased, and the limits of the dull præcordial area were more extended than in health. The pulse was frequent, large, and very jerking; the tongue coated; he had slight cough, with scanty expectoration of frothy mucus, and a few large moist râles were heard scattered over the posterior aspect of the chest.

After a few days he began to improve. On the morning of the ninth day from the date of his admission the cough and pain at the præcordia had nearly left him, and the general disturbance of the system had very much diminished; but the physical signs remained unchanged, and the pulse, though it dropped in frequency, lost none of its eminently jerking character. At noon, on the same day, while rising up in bed to take some food, he suddenly fell backwards and died in a few minutes.

The body was examined thirty-six hours after death. The lungs were congested to a considerable degree. The cavity of the pericardium contained about ʒiii. of blood-tinged serum. The opposed surfaces of this membrane were everywhere coated over with a thick, rough layer of quite recent lymph, but no adhesions had formed between them. The heart was large, and all its cavities distended with soft black coagula. The walls of the left ventricle were thicker than normal. The two posterior flaps of the aortic valves were each of them perforated at their base by a large opening, the margins of which were ragged and thickened, but the free edges of the valve were natural. On the left side of the septum, immediately below the aortic valves, there existed an opening which led into an irregular cavity or sac formed in the muscular tissue of the heart, sufficiently large to contain a small walnut. The entrance into this sac was slightly constricted, and about the size of a shilling; at its margins the endocardium was ragged and slightly thickened. The sac contained a coagulum, which was only feebly if at all adherent to the muscular fibres and lining membrane of the heart, which formed the walls of the cavity; it did not present externally, but the tip of the finger, when introduced into the bottom of the sac, was situated immediately to the right of the root of the pulmonary artery, and under cover of the right auricular appendix: no adhesions, however, existed between the under surface of the appendix and the aneurismal portion of the pericardium. The muscular tissue of the heart in the vicinity of the cavity was softer, and of a darker and duller colour than the rest of the organ. At the posterior part of the sac there was a small laceration into the cavity of the right auricle, situated, when viewed from the latter, about a quarter of an inch above the left margin of the auriculo ventricular opening. This laceration was sufficiently large to admit the end of a small quill to pass without difficulty. Attached to the lining membrane of the right auricle at the part where the perforation had taken place, there were three or four small white wart-like bodies, one of which, larger than the rest, hung pendulous by a slender neck, into the auriculo-ventricular opening. The latter was about half an inch in length, and a quarter of an inch in width, somewhat flattened, and resembled very much the small polypoid growths met with in the cervix uteri when the Meibomian glands are abnormally enlarged. These vegetations were firmly attached,

fully organised, and evidently the growth of time. The endocardium, at their base, was thickened and more opaque than elsewhere. The mitral, the tricuspid, and the pulmonary valves, were perfectly healthy; and neither the endocardium nor the lining membrane of the aorta presented any atheromatous or other morbid deposit. The other organs were healthy.

We had in this case a loud exocardial murmur, rendered more intense during the diastole by regurgitation through the aortic valves, together with the peculiar jerking pulse so characteristic of the latter. There existed, likewise, increased impulse of the heart, and extended præcordial dulness; in part, at least, due to the augmented thickness in the walls of the left ventricle. So far, however, the physical signs had no reference to the aneurismal cavity in the ventricular septum, and it is doubtful whether any existed that had; but as both sounds were unusually loud and diffused, it is quite possible that an endocardial systolic murmur might have been present, and yet be inseparable from the first part of the attrition sound, as it was not audible in the carotids, nor at the top of the sternum.

In speaking of aneurism of the left ventricle, Dr. Hope says:—"On the whole, I am not very sanguine respecting the possibility of detecting many of these partial aneurisms; as a large proportion are so small, and so situated, as probably not to create any sign whatever; and many others, implicating the valves, would probably occasion nothing more than the ordinary signs of valvular disease."

The incursion of the disease, in this case, appears to have been insidious. The patient had for some time experienced palpitation of heart and dyspnœa on exertion, which had increased gradually, and some uneasiness at the præcordia not amounting to pain; but he was unable to assign the period when these symptoms commenced. He is believed never to have had rheumatism before. Beyond this, the history of the case is unknown.

No part of the endocardium, except a circumscribed patch in the right auricle, near the point where the laceration had taken place, presented any appearance of previous inflammation, the loss of substance at the base of the valves, as well as in the lining membrane and tissue of the septum, appearing to be the result of some chronic degeneration rather than of inflammatory action.

SCIENTIFIC LECTURES.

HUNTERIAN LECTURES ON THE ANATOMY OF INVERTEBRATE ANIMALS.

BY RICHARD OWEN, F.R.S.,
Hunterian Professor to the College.

THIS EVENING, APRIL 10, and TUESDAY, APRIL 13.—Lectures XII. and XIII.—*Echinodermata.* Progressive variation of the external characters of this class. Its different orders, Crinoidea, Asteroidea, Echinoidea, Holothurioidea, Sipunculoidea. Complex external skeletons of the star-fish and sea-urchin. Pedicellariæ. Organs of motion and adhesion. Nervous system of Asterias, Echinus, Spatangus, and Holothuria. Digestive system of Asterias, Cematula, Echinus, Holothuria, and Sipunculus. Vascular system. Respiratory organs of Holothuriæ. Spontaneous fission of the Ophiuræ (brittle-stars) and Holothuria. Alleged gynandrism of Synapta; Muller's discovery of embryo univalve mollusca in that genus. All other known Echinoderms dicœcious. Multiplied testes and ovaria of Crinoids. Generative organs of Asterias, Echinus, and Holothuria. Development of the ovum and germ. Metamorphoses of the Echinodermata. Larval Pentacrinus of Comatula. Ciliated monadiform embryo and pedunculate larva of Star-fish. Larval Pluteus of Ophiura and Echinus. Metamorphoses of Holothuria. Predominance of fossil larval forms of Echinodermata in secondary strata.

THURSDAY, APRIL 15.—Lecture XIV.—*Annulata.* Characters of the class; their red blood; exceptions to and value of that character. Characters of the Orders Suctoria, Terricola, Cephalobranchiata, Dorsibranchiata. Structure of the integument: fabrication and secretion of defensive tubes. Muscular and nervous systems. Ocelli and otolitic sacs. Mouth and teeth of the Leech: its stomach, cæca, intestine, and anus. Salivary and hepatic glands. Digestive system of the Earth-worm: the crop, gizzard and "typhlosole." Constricted alimentary canal of the Sabella. Gastric cæca of Arenicola. Prohoscis of Nereids; intestinal branched cæca of Aphrodita. Circulating and respiratory systems in the Leech, the Earth-worm, the Sand-worm, and the Tube-worms. Spontaneous fission of Nais and of young Nereids. Androgynous generative system of the Leech and Earth-worm. Dioecious arrangement of the numerous but simple testes and ovaria in Tube-worms and Nereids. Development of Spermatozoa. Ova, cocoons and ametabolian development of the Leech and Earth-worm. Development and metamorphoses of Nereids and Tube-worms.

SATURDAY, APRIL 17.—Lecture XV.—*Epizoa and Cirripedia.* General characters of these parasitic Articulata. Arrested development of the dwarf-males of Epizoa. Gradation of forms in the Orders Penellina, Lernæodæa and Ergasilina. Their parchment-like integument, characters of Chitine. Organs of prehension and adhesion. Muscular system. Nerves and organs of sense: gradual obliteration of the eyes. Straight and simple alimentary canal. Vasiform heart with two terminal orifices. Diffused venous system. Male organs of Achtheres. Complex female organs of Epizoa: their external ovisacs. Development of embryo and retrograde metamorphosis of the young into the adult animal. Division of the Cirripedes into the orders Balanoidea and Lepadoidea. Chitinous integument, structure, and composition of the progressively complicated shell: position of the animal in its shell: muscles of the shell and operculum: of the pedicle; the jaws and the feet or articulated cirri. Ganglionic subabdominal nervous system: obliteration of eyes in the attached adults: sensibility of the cirri. Lateral maxillæ, stomach, intestine, and hepatic follicles. Dorsal vasiform heart, arteries, and diffused veins. Organs of generation of the Cirripedia; conflicting opinions respecting them: some are androgynous. Dendritic testes: glandular sperm-ducts and long prohoscidiform penis. Ovaria, their different position in sessile and pedunculate Cirripeds: extreme metamorphosis in this class.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, April 10.—MEDICAL SOCIETY OF LONDON. *Subject:*—Dr. RADCLIFFE, "On Epilepsy; its Causes and Treatment." Eight o'Clock.

Tuesday, April 13.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY. Half-past Eight o'Clock.

Wednesday, April 14.—HUNTERIAN SOCIETY. *Meeting of Council.* Half-past Seven o'Clock.

Thursday, April 15.—HARVEIAN SOCIETY. Eight o'Clock.

Friday, April 16.—WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON. Eight o'Clock.

Saturday, April 17.—MEDICAL SOCIETY OF LONDON. *Subject:*—Dr. T. SNOW BECK, F.R.S., "On Inflammation of the Vagina." Eight o'Clock.

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Medical Times & Gazette.

SATURDAY, APRIL 10.

LOOK AT HOME.

WE lately entered our firm and decided protest against certain meannesses and trickeries unhappily too common in the Medical Profession. As, however, more than one instance has come under our notice of men who in the outset of their professional career had stooped to such artifices, becoming, as they advanced in experience and public estimation, heartily ashamed of their own past misconduct, and more and more alive to the degradation such practices inflict on themselves and their calling, we shall dismiss that part of our subject, and proceed to investigate some subtler forms under which the same bias of self-interest is developed, and that in quarters where we should have hoped for better things. For assuredly our task becomes far graver and more painful as we advance. It should be enough for the avowed Greeks of our calling, the hostile squadron outside our heaven-built ramparts, to scour the plains and raise a dust which keeps us in perpetual alarm,—for some villanous impostor, in the garb of a suppliant, and under pretence of befriending us, to make a breach in our defences while we slumber; but what shall be said when the wise, the weighty,

the time-honoured among our counsellors, are found in the camp of the enemy? when the eye of honest criticism can discern through the gloom and confusion those who are our superiors, who should be our tutelars, themselves engaged in busily undermining the very foundations of our citadel?

> "Apparent diræ facies, inimicaque Trojæ
> Numina magna Deum."
>
> The gods' dread aspects scowl from out the gloom
> Malignant influence on my country's doom.

There is a refined way of bearing false witness against your neighbour. The physician or surgeon who is called in to supply the place of a dismissed brother may have the boldness to tell the patient he has been unskilfully treated: such conduct is transparent enough to be seen through by ordinary and honest observers; not so the acts of the man who, having suppressed a portion of the truth, conducts his case to a successful issue, and leaves his patient to arrive at the common fallacy, that because the second method proved the right one, the first was therefore wrong. A yet more subtle fallacy is involved in this proceeding, for it is probable that the original proposition concerning the patient's case was asserted with certain qualifications, and the qualifications are either ignored altogether or misrepresented by the second actor, who is only concerned with the conclusion which his patient draws. An instance of this is to be found in the following case:—Two surgeons are engaged two hours in attempting to reduce a dislocation; a third arrives, who speedily accomplishes the task, and is rewarded with the whole credit. *The fact, that it was a necessary condition to overcome muscular resistance, which involves more or less of time, is in the sequel entirely suppressed.*

Experience in a medical man is canonized by the public as a virtue; and justly so, with this limitation,—that the experience of no one individual be reckoned tantamount to the perfect virtue; for there is nothing dignified by the name of a science of which the combinations are so palpably inexhaustible as those of medicine.

Medical men are proverbially jealous of one another, and, in the class to which we are about to refer, we shall not place that irritable race which can on no occasion tolerate interference, nor even assistance from their fellows; our business now is with a more dangerous description of offenders. There are men to be found, especially in the provinces, who consider themselves, and indeed are considered by the little world around them, the *facilè principes* of their neighbourhood, who, because no one ventures ever to question their judgment, never question it themselves. Now, there is no greater peril to our morals than the false security which a reliance on ourselves begets, and the danger increases in a direct ratio with our success in practice. Such men are to be met with on account of their acknowledged ability in frequent consultations; but, as they endure no opinions but their own, they seldom if ever call in their neighbours. They practically deny the experience of other men, and the truth of the declaration, that in the multitude of counsellors there is safety. Let it ever be remembered, that the practitioner who is first consulted sees most of the case, and that, in a subsequent consultation, he will be as much engaged in protecting his patient from the false conclusions of his colleague, as in gathering fruit from his experience.

Of the quackeries which are perpetrated behind the walls of public institutions we shall only notice a few. Patients are discharged from hospitals daily, and are made to return thanks publicly in the church, whether good or evil has befallen them in the hospital; but no provision is made, when the woman is "churched," for a vote of thanks to Mr. Patience, the village apothecary, who spent ninety hours at her bed-side during her difficult labour.

The gentlemen of the bar have, or had, a by-law, by which they were prevented from travelling on circuit by a public conveyance, lest in doing so they might encounter clients who might also be on their way to the assize town. The practice has been censured as a piece of squeamish and unnecessary prudery; prudery, however, has before now been advantageously used as the shield of virtue, and it is worth the consideration of hospital authorities whether they would not be serving the cause of professional honour by forbidding any member of their medical staff to hold a non-medical appointment in their establishment, which might give such medical officer an excuse for presenting himself on all occasions before the Governors and Subscribers to the charity.

We would deal tenderly with our venerable colleges; yet, with all the care and all the precaution which have been taken to secure the best men for the Fellowship, there is no doubt the distinction has been improperly used by surgeons as a stepping-stone to practice.

THE EXTRAMURAL SEPULTURE BILL.

What has become of the Extramural Sepulture Bill? Nineteen months ago this Act was passed by the Legislature amid the congratulations of all sanitary reformers, who expected to see our gorged churchyards speedily closed for ever, and a new cemetery, worthy of the Metropolis, opened for the reception of the 52,000 corpses which are annually added to the mass of corruption which forms its great fever centres. Since the passing of the Act, the arguments in favour of the Bill have been strengthened by the addition of 80,000 burials in ground that was before said to have been loaded to saturation. What has become of the Extramural Sepulture Bill? Every one interested in sanitary reform, and every one interested in the old order of things, asks this question of his neighbour. Every one having a vested interest in malaria and corruption answers the question by stoutly saying, "It is a failure." Now, as we have always supported this measure, and feel deeply its importance, we will state clearly the reasons that have delayed—but not, we trust, defeated—it. That delay has alone been caused by financial difficulty. The principle of the Bill having been agreed to, the Board of Health, in order to buy up the existing cemeteries, and to open a new one at Abbey Wood, attempted to negotiate a loan with the Guardian and the Royal Exchange Insurance Companies, having first received the authority to do so from the Treasury, and purposing to give as security the fees annually arising from the 52,000 burials. This loan, after some little consideration, was declined by the Companies; two technical objections being urged, on the part of their solicitors, to the proposed security. The first was founded upon the limited duration of the Board. It was said that those who lent money to the Board for more than three years might be deprived of the means of legally enforcing the payment of their capital or interest. The second objection was of more weight. It was urged that, in the present condition of the law, there was nothing to prevent the formation of new cemeteries beyond the Metropolitan district to compete with the Board; and that, as such Companies would be free from the heavy charges imposed on the Board for compensation, etc., the Board would be unable to support the competition. This objection went to the root of all the calculations upon which the Board founded their estimates of an income, and could only be removed

by relieving the Board from the possibility of competition. It was proposed, therefore, as we find by a Minute dated February 2nd, 1851, that a new Act, correcting those technical oversights, should be introduced, containing a clause which should charge the liabilities of the Board upon some permanent public department, and another for the insurance of the fees, to the following effect:—

"That upon all bodies of persons dying within the district of the Metropolitan Interment Act, but which the friends shall desire to remove for burial to some place of burial without the district, there shall be payable such fees or sums as may be authorised upon interments in the burial-ground provided under Sec. 21 of the Metropolitan Interment Act."

This last clause was said to bear hardly upon those who did not wish to avail themselves of the arrangements of the Board. But, considering the vast and preponderating advantages to the great mass of the Metropolitan population, it was surely not too much to require of the wealthier orders who might wish to be conveyed to distant places for burial, that, while freely indulged in that desire, they should yet not be allowed, in gratifying their exceptional wish, to defeat the whole arrangement by introducing an element of uncertainty and a facility of evasion; but that they (*i. e.*, their survivors) should be required to contribute their quota of fees, notwithstanding their exceptional preference for a burial-ground. Such fees would, even in these cases, be well repaid by the advantages of verification of the causes of death, by medical inspectors under the Act; by the consequent diminution of crime and limitation of epidemic disease; and by the general benefit, considered merely in a police point of view. The objection to pay these fees, in fact, on the part of wealthy dissentients, would be as unreasonable as to oppose a Police-rate because they might never require the direct and personal services of a policeman.

Notwithstanding the necessity and fairness of these clauses, the late Government refused to aid in carrying them through Parliament. The law is therefore inoperative: because, having granted powers of borrowing, it refused, when these were found inefficient, to assist in their amendment. The deputation of the Sanitary Reform Association which lately waited upon Lord John Manners, strongly urged these points upon the Government; and we trust that the Ministry, as it affects to turn its attention to the social wants of the people, will aid in carrying out a great reform, which their predecessors managed to render nugatory.

BITTER BEER.

In another column we insert a letter from Mr. Allsopp, the substance of which has already appeared in the *Times*. It is a frank, honest declaration, and quite satisfies us that Mr. Allsopp has been no party to any falsification; and that he, in common with the other great brewers, have really supplied the public with what they profess to do, viz., good, genuine, wholesome bitter beer. When we pointed out, on a former occasion, the importance of the great brewers coming forward and making the statements now tendered by Messrs. Allsopp, Bass, and Ind, it was not so much to clear their own characters as to prevent a general panic arising among their consumers, which would doubtless have rapidly and completely ruined their trade. The general question, however, remains much as it did. It has been stated, that strychnine has been imported into England in large quantities for a certain purpose. Is it true that there has been such importation? is it true that there has been such application? Messrs. Allsopp, Bass, and Ind do not, unfortunately, make up the total of our brewers and retailers; and their assertions, satisfactory as regards their own productions, leave the point, as far as the small vendors and middlemen are concerned, unsettled.

Mr. Allsopp is not likely to have paid much attention to the subject of the adulteration of food. The probability is, that he has no conception of the frauds which are practised by the traders of the poor classes, nor of the total want of anything like prevention on the part of the authorities. Adulteration is not practised to any great extent among the rich. Their tradesmen know that it is their interest as well as their duty to supply a good article. The bread, the butter, the meat, the coffee, the tea, and the beer of our upper classes are, for the most part, unexceptionable. If any common article of diet be much adulterated, it is wine. But among the poor it is very different; the demand is more than the supply; the suppliers more numerous than the amount of their stock justifies; the purchasers are clamorous for cheapness, and consider abundance more than quality. All the incentives to care and discrimination which act upon the higher tradesman are absent here; and the result is, that between a careless public and an unscrupulous trade, the amount of falsification of food is almost incredible. It is only by glimpses that we get a knowledge of what is going on, but those glimpses disclose to us a state of things which demand prompt and instant investigation. If we wished to investigate the bread or the meat which is sold in Ratcliff-highway or Whitechapel, we should not go to a baker or a butcher of Belgravia or Hyde Park-square; and it would be just as absurd to admit the "bitter beer" of our eminent brewers as a proper sample of the beverage of the poorer class.

There is one part of Mr. Allsop's letter in which he almost reproaches us for having brought this matter forward. But he will see, on a little reflection, that it was our bounden duty to make those statements public in this country which had been publicly proclaimed in Paris, and published in the leading political journal of the day, and in one of the most eminent of the medical periodicals. As medical men, and guardians of the public health, it was impossible for us to let the matter pass over without comment. Put the question to any sensible man in the kingdom, as to what course we should have pursued, and there can be but one answer. It is absurd to call upon us to prove M. Payen's assertion. It is not in our power to do so: but it is in our power to call upon those whom it concerns to disprove it: and we conceive that, if we did not do this, we should be doing our duty neither to the public nor to the Profession.

THE "BIRKENHEAD" TROOP-SHIP.

GALLANT CONDUCT OF THE ASSISTANT-SURGEON.

The disastrous shipwreck of the "Birkenhead" troop-ship on her voyage from Symon's Bay to Buffalo has brought to light another instance of the devotion and courage which always actuate the medical officers of the Navy. In that fatal shipwreck, in which it is supposed that nearly 500 soldiers have perished, *Assistant-Surgeon Culhane managed to swim three miles to shore*, and then to ride ninety miles in search of assistance for those who were fortunate enough to survive that horrible occurrence. In future, Lagos and Danger Point must be words with which to answer those who would still endeavour to thwart the just intentions of Parliament towards the ill-used assistant-surgeon.

REVIEW.

The Principles and Practice of Surgery. By William Pirrie, F.R.S.E., Regius Professor of Surgery in the Marischal College and University of Aberdeen. 8vo., pp. 918. London: John Churchill. 1852.

The last two years have been fertile in the production of works on the principles and practice of surgery; and authorship has not been confined to the surgeons of this Metropolis. There has, indeed, been a remarkable addition to the literature of the chirurgical art during this period. We have had Mr. Skey's Operative Surgery, Mr. Bransby Cooper's Lectures, Professor Miller's Principles, Mr. Orr's Principles; and to these are now added a bulky volume by the Aberdeen Professor. Some might be inclined to fancy, that within the last two years there has been a great amount of novelty in reference to the principles and practice of surgery, and that a corresponding share of originality was to be found in these publications. Such, however, is not the case; and therefore it may be justly asked if the Work before us were at all necessary. Mr. Pirrie has probably felt this; for in a modest preface he tells us that the work was written "in compliance with a wish, repeatedly expressed, on the part of the students of surgery at this University, to be furnished with a compendium of my Lectures." The author has performed his task well and creditably. He has presented a text-book on surgery which will be acceptable, not only to his own pupils, past or present, but useful in the hands of all who affect the literature as well as the practice of surgery.

It must necessarily happen in a treatise on general surgery, that a great deal of matter will be borrowed from previous authors who have written most largely and succinctly on particular points. In the work before us, Mr. Pirrie has made his selections with judgment, and rather increased than lessened the value of his work, the great characteristic of which is its easy style. The nature and symptoms of disease are accurately, clearly, and sufficiently described; and we may especially mention this in reference to the preliminary chapters on Inflammation and its consequences.

Mr. Pirrie makes some judicious and practical remarks on the opening of large chronic abscess, and correctly states, that—

"The treatment of chronic abscess is a matter of great anxiety to the intelligent surgeon, in consequence of the danger, lest the opening of the sac should be followed by violent irritative fever, which has a tendency to merge very speedily into hectic fever; and the following is the method which he has thought to be the most safe and effectual to employ in evacuating the matter by degrees.

"The best apparatus for this mode of treatment consists of a long trocar, a canula furnished with a stop-cock and a fine exhausting syringe which fits the canula. About an inch and a half, or two inches from the spot where the sac is to be opened, a small aperture should be made in the skin; through this the trocar is to be inserted, carried under the skin, and sent through the sac, where it is to be opened; the trocar should be withdrawn, the stop-cock being shut before it is completely removed; the syringe should be applied to the canula, and the matter drawn off, care being taken to shut the stop-cock after each stroke of the syringe. Gentle pressure should be applied to the sac, and while the canula is being withdrawn, pressure should be applied over its track, to prevent the admission of air. The opening should be closed up very carefully by means of plaster, and preserved close, until adhesions have taken place. Rest and every judicious precaution should be strictly enjoined for some time after each operation, to diminish the danger of inflammation of the sac."—Pp. 23.

In the section on Fractures are some valuable and interesting remarks regarding the mode of union in certain instances, as in the patella. The chapter on Fracture of the Neck of the Thigh-bone is well put together, and contains, in a short space, a large amount of information in reference to the most important points connected with that injury. But we are surprised to find the author has so slightly alluded to one of the most important class of injuries the surgeon has to deal with—we mean compound fractures. In compound fracture of the patella, however, the author is of opinion that, when the constitution is not debilitated, an attempt should be made to save the limb; and he records several cases—one of which was under his own observation—where perfect recovery took place. There can be no doubt that in cases of compound fracture into the knee-joint, when the patella only is the bone injured, there is a considerable chance that the patient may recover without amputation; but it is a great question as to whether this severe measure should not be adopted in the majority of instances where the condyles of the femur have been extensively fractured and the joint laid open. Amputation even is rarely followed by success; and, if the patients are left alone, such extensive irritation and inflammation occur that they are almost as surely carried off; in fact, it is rare to see an adult patient who has recovered after amputation for compound fracture of the thigh into the knee-joint, and as rare to meet with the same success when amputation has not been performed.

Diseases of the periosteum and bone are but imperfectly treated, some affections of the latter not being mentioned. The sections, however, on Suppuration in Bone, Caries, and Necrosis are carefully written, and the symptoms and characters of these various affections well described. The following is the author's distinction between ulceration of bone and caries:—

"Ulceration of bone is characterised by an ulcer of healthy appearance. Examination with the probe is sufficient to show the nature of the disease. The bone itself which supports the ulcerated portion is not diseased, differing in this respect from the state of the bone in caries; for, while there is in each disease the removal of part of a bone, in consequence of inflammation, in a state of simple ulceration the portion of bone forming the surface of the part retains its natural compactness and firmness; but the portion forming the surface of a carious part, and to some depth below, is in a state of interstitial absorption. The action of the vessels is consequently very much weaker in the latter case than in the former; and hence arises the difference, as regards the tendency to heal, between the two diseases, which in other respects are very similar."—P. 360.

The author speaks of caries—as far as regards the treatment of the disease—under two heads, viz., accessible and inaccessible caries. He places under the latter category disease of the vertebræ, hip-joint, and knee, and affirms that it does not admit of excision into those parts. This is, we think, a somewhat hasty conclusion; especially when it has been shown since the time of Pott, and particularly in more recent days, that both excision of the carious head of the femur and of the articulating extremities of the bones forming the knee-joint may be performed with success. In a very recent number of this journal there was reported a successful instance of excision of the knee-joint; and it is by far too sweeping an assertion to state, that caries of the hip and knee-joint is inaccessible to the surgeon; it is true, that in the majority of cases of the disease in these situations, no other cure but that which Nature or the amputating knife brings about can be looked for; still there are instances in which the surgeon may be justified in resorting to the excision of the carious bone, and with every hope of success; moreover, there is another operative procedure of a less serious nature, which may be carried into effect on the knee or hip, viz., free incisions made into the joint,—a method lately prominently brought before the Profession by Mr. Gay, and we believe calculated to be of great service in some serious forms of diseased articulations.

The author condemns the method of injecting a hydropic joint with tincture of iodine, than which, says he

"Nothing could be more injudicious or more justly deserving of unqualified condemnation."

His practice with reference to the evacuation of the contents of an abscess in connexion with disease of the hip may be fairly questioned.

"When it is evident that matter has formed, and is beginning to make its way to the surface, it appears to be the preferable plan, on the whole, to make an incision, by which means considerable suffering may be prevented, and the extent of disorganisation limited."—P. 433.

There has been, it is true, much difference of opinion as to whether these abscesses should be opened at an early period or not.

In the chapters on the Arteries and Veins much useful and carefully-written matter will be found. A very interesting case of acute arteritis, occurring under the author's care, is described. Mr. Pirrie briefly enumerates the various modes of treating aneurism. He estimates the treatment by pressure at its proper worth; and it is pleasing to see that the latest authorities on surgery in Scotland, viz., Professor

Miller and our author, are not imbued with that intense prejudice against this novel and successful treatment which characterises their countryman, Mr. Syme. All the leading surgeons are gradually acknowledging the superiority of pressure over the ligature, in a great number of instances of aneurism; and even Mr. Syme himself will, we have little doubt, if he live long enough, be forced to confess that this method ought not to be rejected without examination as to its utility, to say nothing of its superiority.

Mr. Pirrie very justly condemns delaying the operation for strangulated hernia, when other measures appear to be useless; and in the following paragraph he gives us the amount of his own success in the operation, and the reasons for this:—

"I have performed the operation for strangulated hernia according to the usual mode a considerable number of times – I believe twenty-three in all, and (except in one case, where death occurred in consequence of an attack of phlegmonous erysipelas, which commenced after the patient was out of all danger) in every instance with success. This success I attribute to two things,—namely, avoiding all undue and useless handling, and performing the operation early. My decided impression is, that the reason why the operation is so frequently followed by death, instead of being one of the most successful of the great operations of surgery, is too great delay in resorting to an operation, and the undue and injurious use of the taxis, even after its adoption has proved unavailing."—P. 596.

In a subsequent chapter, he gives the history of lithotomy, describing the various processes. The author advises, that in case a large stone should be found after cutting into the bladder, the right lobe of the prostate should be incised as well, instead of making a too free incision in the left side alone. This is most judicious advice; and well would it be if it were to be more often followed.

Mr. Pirrie, together with some others of his northern contemporaries, is somewhat taken with the mode of treating certain severe forms of stricture recommended by Professor Syme; but we cannot help surmising, that his opinion respecting the perinæal section has been arrived at mainly from reading the published reports of the cases operated upon in Edinburgh, for he says,—

"It is perfectly certain, that in many cases this mode of treatment has been exceedingly satisfactory; while in a very few the cure has not been permanent—a circumstance which may have been owing to neglect of the judicious precaution of occasionally introducing the bougie.—P. 713.

Now, without making any reference to the angry discussion which has been carried on of late about this matter, and without trusting to any of the unsatisfactory reports of these operations, we happen to know, from our own experience, that the division of stricture by the perinæum upon a grooved sound is not only not followed by permanent good results in many cases, while in others death and danger to an imminent degree have followed; and we may venture to prophesy that this operation will never be a favourite with the majority of surgeons. Mr. Pirrie appears prejudiced also against the employment of caustic in bad forms of stricture; but we would beg of him to give it a fair trial. The London surgeons have tested its value, and found that the potassa fusa is, in some cases, if used with precaution, an admirable remedy, and likely to supersede the use of the knife.

The author has devoted a considerable space to the subject of cleft palate, and the operation for remedying this deformity. He is largely indebted to Professor Fergusson upon this important subject, and is evidently one of those who understand the merits of the vastly improved operation of the Professor of Surgery in King's College. It is pleasing to contrast this liberal appreciation of a most scientific proceeding, with the total disregard it receives in the latest London work on operative surgery. In Mr. Skey's book, we find that Mr. Fergusson's views with reference to the necessity of making a preliminary division of the levator palati muscle—the essential feature in the operation—are only mentioned to deny their correctness. Mr. Skey still adopts the old operation, which, in reality, is conducted neither upon scientific principles, nor with any reference to the anatomy or physiology of the parts.

We must now close our notice of this work, which we have reviewed at greater length than we intended. It is an ably written and useful compendium. Throughout the whole work there are a clearness and modesty of style which do the author much credit. The value of the work is enhanced by its numerous woodcuts.

PROGRESS OF MEDICAL SCIENCE

SELECTIONS FROM JOURNALS.

THE ENDOCARDIUM AND ENDOCARDITIS.

An important paper by Professor Luschka, of Tübingen, has just appeared. It is affirmed, that the anatomical constituents of the endocardium have hitherto not been properly described, and that the endocardium is in reality made up of the same structures which exist in the coats of the arteries, pressed together, and reduced to their extremest tenuity. The heart is then to be looked upon as an expanded and modified vessel, with muscular fibres disposed outside it. The epithelium of the endocardium is of the flat or pavement variety, and its form is either lancet-shaped, or less frequently polygonal. The cells *fuse* into each other very frequently, so much so, that for a long time these fused cells were taken for a "basement membrane." The epithelium cells appear to be destroyed eventually by fatty degeneration and disintegration. Outside the epithelium, and gradually succeeding on it, are longitudinal fibres, which are not, however, as in the vessels, joined by homogeneous substance, but run free and isolated. External to these fibres are elements corresponding to the contractile coat of arteries, viz., elastic fibres and cells which resemble the "contractile cells" of Kölliker. This coat differs remarkably in the auricles and ventricles, the fibres being finer, laid less thick upon each other, and less mixed with perforated lamellæ in the latter than the former. At the valves it becomes extremely thick and strong. The deeper portion of this coat is supplied with vessels, while its superficial portion, and the still more superficial longitudinal fibres are perfectly extra-vascular. Outside the elastic fibres, and next to the muscular mass, is connecting tissue, very richly supplied with vessels and nerves. The auriculo-ventricular valves are formed by two folds of endocardium, between which vessels run, and where nerves (of the sympathetic kind) can also sparingly be found.

The first stage of endocarditis is congestion of the vessels in the deep elastic layer and the connecting tissue; then exudation occurs, and, if it penetrates the longitudinal layer and the epithelium, as is always the case in acute endocarditis, it destroys the polish and transparency of the endocardium. The exudation may collect on the free surface, and be swept away or not by the stream of blood. Luschka denies altogether Rokitansky's statements, that exudation may be deposited from the blood *on* the endocardium, and asserts, that the exudation *on* is always continuous with exudation *under* the non-vascular structures. The exudation runs through various changes, as in other parts.—*Virchow's Archiv. für Pathol. Anat. Band.* IV. 1852, p. 171.

NEW TEST FOR SUGAR.

It is stated by Professor Böttcher, that the least quantity of sugar in urine, or any other fluid, may be detected by adding a little carbonate of soda and a small quantity of magisterium bismuthi, and boiling briskly; when the liquid cools, the bismuth, if sugar be present, is reduced, and forms a black powder.—*Deutsche Klinik.*

RENEWED SECRETION OF MILK AFTER WEANING.

Occasionally, when a child has been weaned early, it has been found necessary to put it again to the breast, and for this purpose a wet nurse is usually chosen. It appears, however, from some observations made by M. Gubler, that, even after three or four months, if the child be put again to the breast of the mother, the milk will return, and seems to be extremely well adapted for nourishment. Four cases are given in support of this opinion. In one case the milk did not commence to flow for four days after the child had been again put to the breast, but subsequently flowed abundantly.—*L'Union Méd.*

EMPLOYMENT OF SEA-SALT IN INTERMITTENTS.

The following are the conclusions of a memoir presented by M. Piorry to the Academy of Medicine, on the use of sea-salt in intermittents:—

1. That sea-salt in doses of from 150 to 300 grs. in three or four ounces of any vehicle, causes in general a rapid diminution in the size of the spleen in ague, and in the great majority of cases prevents the febrile accession.

2. That it acts with as much energy on the spleen as the "soluble quinine."

3. That it is a good substitute for quinine when this cannot be obtained.

4. That it can be employed with quinine; and that, if both remedies are used in large doses, the effect on the spleen is sometimes very rapid.

5. That, although the cases cannot be marked with precision, it appears sometimes to be preferable to quinine, and the reverse.

6. That, as a prophylactic, it promises to be of great use in marshy countries.

KOUSSO FOR ASCARIDES.

Dr. Hannon, of Brussels, has used the kousso in the form of injection, and by the mouth, followed by manna, with great effect in children tormented with ascarides. Sometimes, after all other means (aloes, senna, etc.) had failed, two or three enemata effected a complete cure. Hannon considers it to be the best vermicide known.—*La Presse Méd.*

DEVELOPMENT OF GAS IN THE BLOOD CAUSING SUDDEN DEATH.

This singular disease, which was mentioned by Morgagni, and of which a case was published in 1838 by M. Ollivier (d'Angers), has again been observed by M. Durand-Fardel, who has presented an account of it to the French Academy.

A lady, aged 56, accompanied her sick husband to Vichy. She was large and well formed, and had lately become fat. Her general health was extremely good; she had no gouty or rheumatic pains, nor any other symptom of ill health, except that she was habitually rather short breathed. Finding herself at Vichy, she wished to take the baths. On the 20th July, 1850, she went to take her second bath at four o'clock in the morning. The night before, she had been apparently well, had dined as usual, and had slept well. When she arrived at the bath she was, however, more breathless than usual, and was obliged to rest before entering it. Seeing her in this state, the attendant begged her not to take a bath; but she persisted in entering, and remained in half an hour. At the end of this time she got out, but complained of great oppression, and seemed agitated; the respiration became panting, and she could not speak. M. Durand-Fardel was sent for, and arrived in less than five minutes, but before he got there she was dead. Although there was no doubt of her death, M. Durand-Fardel opened a vein. The blood which flowed out was, to his astonishment, not dark, but violet, and frothy from numerous bubbles of gas of unequal size. The *sectio* was made twenty two hours after death. The heart was very large; the right auricle and ventricle filled with a perfectly liquid blood, containing bubbles of gas, some of which were as large as a pea, others, more numerous, about the size of pins'-heads; the blood of the venæ cavæ pressed into the auricle was frothy, like lather; the left side was absolutely empty; the left ventricle considerably hypertrophied; the orifices healthy. Except in the sinuses of the brain, the blood all over the body, even in the splenic vein and the venæ portæ, was equally frothy. The lungs were not emphysematous, and were moderately engorged. The liver, spleen, and kidneys were congested, but otherwise appeared healthy. The brain was less congested; the blood in the sinuses was scanty and not frothy; there was no lesion of the brain or of the commencement of the cord. The singular chance which permitted M. Durand Fardel to see the existence of the gas in the blood immediately after death, renders this observation very complete. As to the nature of the gas, or the cause of its rapid development, nothing at present is known.

GENERAL CORRESPONDENCE.

THE NATIONAL SYSTEM OF VACCINATION IN ENGLAND.

[To the Editor of the Medical Times and Gazette.]

Sir,—When Mr. Grainger thought fit to burke all discussion of my paper at the Medico-Chirurgical Society by overlaying it with an incongruous mass of statistics drawn from the archives of the Epidemiological Society, and then to call his speech a reply to my paper, I felt that, to prevent misrepresentation, one only course was before me. I solicited permission from the Council to publish my paper forthwith, and *in extenso*. For reasons which I have no doubt were valid, the Council thought it right to decline acceding to my request. The result, however, has proved the correctness of my anticipations. In two successive numbers of your contemporary, the *Lancet*, I have been most unfairly held up to public animadversion. On one occasion, I am gravely accused of preferring the evidence of my own senses at the Small-pox Hospital to some fantastical investigation whether Louis XV. of France had ever been vaccinated; and in the number for the 3rd inst., I am accused of recommending the practice of infantile inoculation! It is quite time, Sir, as my paper is not now to be published, that such unfair criticisms should be met openly; and I claim your friendly aid to set me right with my professional brethren, if so be that there are any who have failed to disentangle the web of sophistry which the *Lancet* has thought right to throw round my paper.

So far from recommending infantile inoculation, I pointed out, in the strongest language I could use, its dangers. I pointed out, that if the Members of our Legislature had themselves a firm reliance on the efficacy of vaccination, they ought not to hesitate in making, as far as possible, the vaccination of infants compulsory, seeing that it is during childhood that the real advantages of vaccination are most incontestably manifested. I then added, "If the Legislature either cannot or will not enforce vaccination, then the existing restriction on inoculation should be, to a certain extent, removed." I expressed my belief, that inoculation, under such circumstances, practised exclusively by medical men, with proper safeguards against the spreading of infection, might be safely adopted.

I appeal to your reporter, Sir, and beg to ask him, who heard the paper read, whether this was not the spirit and tendency of the paper. I pointed out existing evils; I shadowed forth the possible remedies. I appeal to those of your readers who have seen the last two Numbers of the *Lancet*, whether my observations have been treated with that spirit of candour which befits the occasion. What I wrote, I wrote after long reflection, and I contend that the speech of Mr. Grainger offered no contradiction whatever to the statements and, opinions put forth in my paper.

But the *Lancet* of the 3rd instant, in its haste to find fault now discovers that the system of public vaccination, as at present carried out, is radically wrong, and declares that no good will be done, nor will vaccination advance in public favour, "until all qualified practitioners are appointed public vaccinators, with a small but adequate fee for every successful case." I am sadly afraid, Sir, that the suggested remedy will be found totally inadequate to meet the pressing exigencies of the case. The *Lancet* must look a little deeper into the well before he will get a glimpse of the truth. He must see the Vaccination Act of 1840 superintended and carried out, not by a Medical Board, but by a clerk in the office of the Poor-law Commissioners. He must see the only Medical Board in this country which has anything to do with vaccination devoting its energies mainly, I had almost said exclusively, to the distribution of a few thousand ivory points annually. He must reflect, that while adult revaccination has been practised extensively on the Continent for more than twenty years, and been made the subject-matter of inquiry by at least a dozen commissions in France, Holland, and Germany, it has never once been even alluded to in the reports laid before the British Parliament. He must see, lastly, medical men throughout the length and breadth of this land, dealing out, with no sparing hand, and unchecked by any authority, vaccine lymph from what they are pleased to call new and improved sources; and, when he has done all this, and observed the practice at the Small-pox Hospital for about a month, he will then be in a condition to enlighten his readers as to the real causes of the "present defective state of public vaccination in this country," and the required remedies. I am, Sir, &c.

6, Camden-square. George Gregory, M.D.

SULPHURIC ACID IN DIARRHŒA.

[To the Editor of the Medical Times and Gazette.]

Sir,—The use of diluted sulphuric acid having been lately recommended in the treatment of diarrhœa by men of name and standing in the Profession, I have been led to try its efficacy, although I must say it is one of the last remedies I should have supposed to be beneficial in that complaint.

The first patient to whom I gave it was a boatman of this place, who had had diarrhœa for a fortnight, and had been under the care of the surgeon of his club for ten days without deriving any benefit from the treatment pursued; when he came to me, he stated that he had four or five liquid evacuations in the day, which did not appear to affect his health, but interfered with his occupation. He took half a fluid drachm of the diluted acid in an ounce and a half of sugar and water three times a day. In two days he called on me, and stated that he was quite cured.

On Saturday, the 14th Feb., a woman brought an infant, of eight weeks old, who had suffered from diarrhœa for a fortnight, having as many as twelve or fourteen loose evacuations daily; every occasion of taking food was followed by an action of the bowels. I ordered two minims of the diluted acid to be taken thrice daily in syrup.

On Monday, the 16th, I learned that the evacuations were reduced to two daily. The mother said she thought the medicine

griped the child. I now desired her to give only half the quantity, with some additional syrup.

On Wednesday, the 18th, I found the complaint had quite ceased; and, as I have heard nothing of the child since, I conclude it continues well, as I desired it might be brought to me again if the disorder returned.

In this case, I believe I gave a larger quantity than was necessary to so young a child, and, another time, should begin with half a dose.

Should subsequent experience confirm the safety of administering the sulphuric acid to infants, it would be an advantage gained; as every one must have frequently observed the inefficacy of the ordinary astringents, and lamented the dangerous consequences of sufficiently large doses of opium in the treatment of diarrhœa in young children. I am, &c.

Ramsgate. JOSEPH CANHAM, M.D. Edin.

SPASM OF LARYNX.

[To the Editor of the Medical Times and Gazette.]

SIR,—I hardly know whether the subjoined case of spasmodic affection of the larynx, simulating laryngitis in some points, be worthy of a place in your pages. Contrasting it with a case of the latter affection which was published in the *Medical Gazette* for Nov. 14, 1845, it is perhaps of some little interest.

Miss P., aged about 38, in weak health from a chronic ulcer of the leg, went to church on the evening of February 15, 1846. While there she coughed loud twice, which was followed by a peculiar sensation in the throat, as if, she said, the uvula had got into the larynx.

I was called to her between 8 and 9 p.m., and found her making a peculiar hissing noise during inspiration; she had only an occasional cough, the expiration was natural, and the voice unaltered; the larynx felt dry but not painful, nor was it painful to the touch externally. There were no appearances of inflammation about the uvula, tonsils, or pharynx. The patient's pulse was full and frequent, her face flushed, and her expression that of suffering. She had the sensation of a ball in the throat, and felt hysterical. I learned that she was subject to hysterical feelings, though not to actual hysterical paroxysms. I prescribed a mixture containing antim. potassia tart. gr. ij., vin. ipecac. ʒiij., a fourth part to be taken every quarter of an hour until vomiting should be induced. I was called back shortly, and found that the hissing sound had given place to a sonorous croupal inspiration, which became more acute and again more grave in tone, from time to time. Deglutition was performed with much difficulty, inducing spasmodic dysphagia; the voice was unaltered. I administered by degrees the whole of the emetic mixture, which produced vomiting at the expiration of about an hour from the administration of the first dose. The matters vomited consisted principally of undigested food, pork, etc., taken at dinner. The inspiration, which became periodically more frequent and spasmodically difficult, did not appear to be relieved by the operation of the emetic, and I prescribed a mixture consisting of sp. amm. arom., sp. æth. sulph. co., tinct. hyosc., dec. aloes co., and aq. puleg., to be taken every three hours, so soon as the stomach should become quiet. I was sent for again about 11. The patient had had a suffocative paroxysm; the breathing was no better. The first dose of the mixture was rejected by the stomach. After my departure another suffocative paroxysm occurred, but the sonorous inspiration ceased at 3 a.m.

Feb. 16, 10 a.m.—Respiration quiet, pulse natural, larynx tolerably easy, headache. A slight return of the affection in the afternoon; a more severe one after I saw her at 9 p.m., lasting about half an hour.

17th, 10 a.m.—Better; to have a cordial and antacid mixture. In the evening she was much better, having lost the sickness and anorexia of which she complained in the morning.

This attack did not take place at the catamenial period. The patient's health was afterwards greatly improved by the healing of the ulcer under Bayuton's plan of treatment.—I am, &c.,

MARTIN M. BULL, M.R.C.S. Eng.

St. Saviour's-road, Jersey.

THE PHARMACY BILL.

[To the Editor of the Medical Times and Gazette.]

SIR,—I observe in your Number for April 3rd (page 347) some remarks on the Pharmacy Bill, founded on an imperfect acquaintance with the facts of the case, and the object of the Bill.

The Select Committee to whom the question has been referred, are engaged in a searching and impartial investigation, in the course of which the representatives of all parties directly or indirectly interested will be fully and fairly heard. Every endeavour will be used, if objections should arise, to meet such objections by amendments in the Bill, and thus to remove all doubt as to the purpose for which it is intended—namely, that of raising the character and qualifications of chemists and druggists, by means of education, examination, registration, and representation.

The course of education defined in the Bill is limited to those subjects which strictly belong to the department of chemistry and pharmacy. Even toxicology is to be expunged, at the desire of the Society of Apothecaries, to remove the possibility of a suspicion that the term is used in its extended sense to include the medical treatment of cases of poisoning. The term chemistry will comprise all that was intended, namely, the detection of poisons, and the chemical action of antidotes.

The entire Medical Profession will be exempted from the operation of the Bill, which is, as its name implies, "A Bill for Regulating the Qualifications of Pharmaceutical Chemists."

There can be but one opinion respecting the importance of education in those who undertake the responsible duty of dispensing medical prescriptions, and dealing in substances which may be instruments of life or death, according to the skill and accuracy with which they are prepared.

I have thought it right briefly to draw your attention to the above facts, trusting that you will see the justice and propriety of considering both sides of the question, and making yourself fully acquainted with the object and tendency of the Bill, before inserting criticisms calculated to raise an unfounded prejudice against it. I am, Sir, &c.

15, Langham-place. JACOB BELL.

[Mr. Bell's remarks do not in the least alter our opinion, that the effect of his Bill will be very injurious to many members of the Medical Profession. We have not opposed the Bill without consideration, nor without endeavouring to make ourselves acquainted with its remote as well as its immediate effects. It is all very right and proper to educate druggists, to have a registration of them, and to secure to the public a faithful discharge of important duties,—these constitute the merits of the Bill. Its demerits are, that, without a clause prohibiting the druggists from counter practice, its effect will be to swamp the apothecaries. This point Mr. Bell does not touch. Moreover, the Bill creates another corporation, with extensive powers to discharge duties which might be well executed by any other of the existing bodies. If it be true, as we infer from Mr. Bell's note, that the Apothecaries' Company have consented to the Bill, then we can only say that one great argument the more presents itself to induce the General Practitioners to lay aside all differences, and to unite in the endeavour to found a College on a proper representative system, which may neither ignore the interests of the Profession, as the College of Physicians; nor neglect them, as the College of Surgeons; nor sacrifice them, as the Society of Apothecaries.—ED. *Medical Times and Gazette.*]

BITTER BEER.

[To the Editor of the Medical Times and Gazette.]

SIR,—Referring to an article in your Journal of last week, I will not stop to inquire, as you do not appear to have done so, whether it be a fact, that the large quantities of a drug called strychnine, manufactured in Paris, are intended for this country, and devoted to the poisoning of the English drinkers of bitter beer, but will at once respond to your call upon "the honest manufacturers of bitter beer to take up this subject, and satisfy the public that this atrocious falsification is limited."

I will not appeal as the senior partner of a firm which, for nearly half a century, has been one of the most eminent in the pale ale trade,—I will not appeal, I say, to the millions of our customers who have grown grey in the consumption of our ales, to prove that such an insinuation cannot by possibility apply to us; but, on behalf of ourselves and the trade, I will at once challenge the very largest and strictest inquiry. The surveillance you allude to we court to the utmost. Our vats, mash-tubs, coppers, and all the apparatus of our breweries are from this day open to you.

A "commission" has been threatened, and a public report as if upon an already proved delinquency!! Let such commission be at once appointed. Let it consist of the most acute and scientific

investigators. We offer to defray the charges of it. Let it at once proceed to examine our stock in course of manufacture in our stores and in the docks; nay, more, that there may be no possible contrivance, let this "commission" test the thousands of barrels and hundreds of thousands of dozens lying in our customers' cellars, whose names we are prepared to give, that the examination be complete as well of the past as the present.

Will this, Sir, suffice? Can more be suggested,—for all that is required shall be done. But, when this is over, and the public, and the Medical Profession, and the men of science are quite satisfied, I trust we may then be permitted to request from medical gentlemen and men of science, that, before throwing out suggestions in the public Press likely to lead to "a belief in the universality of a fraud that would absolutely destroy the sale of their beer, and ruin a large and deserving class," they would be good enough to make such previous inquiries as may put it in their power to exempt such "large and deserving class from such ruin." I am, &c. HENRY ALLSOPP.

The Brewery, Burton-on-Trent.

MEDICAL ETIQUETTE.

MEDICAL RESPONSIBILITY IN GRANTING CERTIFICATES IN CASES OF INJURY OF THE HEAD FROM EXTERNAL VIOLENCE.

[To the Editor of the Medical Times and Gazette.]

SIR,—You will oblige me by insertion of the following, with a view to receiving the opinion of some of your numerous and experienced correspondents, as I am anxious, while I may not demean myself improperly to a professional brother, that, at the same time, the interests and rights of the Profession generally may not be violated in the person of a correspondent and constant reader of your valuable journal.

In an interesting lecture by Professor Christison, as given in the *Monthly Journal of Medical Science* for November, 1851, it is stated:—"A few years ago, I was consulted by a solicitor, in the interest of a person of good station in the North of England, who was accused, on suspicious circumstances, of murder by poison; and I was requested to give my opinion particularly on the validity of the chemical evidence, and, if it appeared valid, to furnish 'suggestions for shaking it.' This incident will illustrate the object of a party's agent when he looks out for medical evidence. When a medical man is asked, on the part of the Crown, his opinion, either as an expert, or in consultation, on a criminal case in Scotland, he is expected by the Crown officers to maintain rigorous impartiality and independence; nor in general is there any risk of incidental temptation to the contrary. But, when he is asked to be a witness for the prisoner in a criminal case, or for either party in a civil action, he may rest assured that, although the agent may not own it, even perhaps to himself, his expectation or wish is, in most instances, much the same with that of the English solicitor;" concluding with a condemnation, in strong terms, of any medical man who so far forgets what is due to himself, as a member of an honourable Profession, "if he consents to appear for the mere purpose of contradicting the medical details of a case, while he cannot deny the main inference to which they conjunctly lead," etc. etc. The following is an abstract of the case:—

A man, aged about 50, was felled to the ground by a blow over the protuberance of the left parietal bone, the wound having been inflicted by a stout athletic man, accustomed from his profession to wield the hammer. Having dressed the man shortly after, and attended him, I was called on by the public prosecutor, about eight days thereafter, and deponed to a wound, about three inches long, which had divided the scalp, and fractured and depressed the bone; that "having apparently recovered from the more immediate effects of the injury, though there were at present no symptoms indicative of immediate danger, I could not certify the wounded man as out of danger." Meantime the man who had inflicted the blow was committed to prison. Six days thereafter, at the request of the prisoner, another surgeon, without consulting with me, or making me aware of his intention, visited my patient,—the wound in the scalp being adherent about half the length, while the scalp all around was tumid and puffy; and, after a cursory examination, pronounces, at the bed-side, the case as trifling, and forthwith grants a certificate, "on soul and conscience," which is used by the prisoner to obtain liberation from gaol, on finding bail, previous to a public trial.

In the above circumstances, it is asked, was this gentleman acting according to medical etiquette in pursuing the above line of conduct? The question as to danger, it is obvious, may be a matter of opinion, in which, however he may differ from the Profession generally as to cases of compound fracture of the cranium, he may still conscientiously hold. No doubt it may, and very probably will afterwards, be a subject of inquiry, Was this gentleman warranted, without being aware of the amount of injury to the bone, (which it is evident he could not be,) to grant a certificate at all?

This last, however, it is possible, he may endeavour to explain by a reference to general symptoms, without deeming it necessary to take into consideration the condition of the injured bone, and which, I may state, after some suffering on the part of the wounded man, has already partly exfoliated. Whichever way, as the case may be instructive to those who happen to be situated in the predicament set forth by Professor Christison, I have stated the facts of the case, leaving to my professional brethren to decide.

I am, &c. SCOTUS.

Banks of Lochleven.

UTERINE EGESTA.

[To the Editor of the Medical Times and Gazette.]

SIR,—Uterine affections have of late so much occupied your pages, that perhaps I should apologise for intruding on your notice the following particulars: — A married woman, who has had several children, and whose health has been much lowered by quickly repeated gestation, I am generally called upon to see at the periods of menstruation. At such times she is commonly very nervous, suffers much pain and sanguineous discharge; most commonly, after three or four days, one, two, or three membranous bodies, about the size of a pullet's egg, and having a ragged fibrous substance attached to one end, the size of a nutmeg, will come away, and then everything is righted. Not long since, I attended a woman with the first child, who did well. A few months after I was called to see her, and found her suffering intense uterine pain at intervals; presently she expelled a membranous body of the same character as the above, but larger than a goose-egg, and a few days after one smaller. I have heard of no more in this case. These membranous bodies were thin bladder-like sacs, containing only some slightly opaque fluid, with a fleshy fringe-like attachment. Am I to call such appearances hydatids? Some years ago I attended a woman who was considered to have completed her pregnancy, and everything awaited, as usual, the infant, when lo! at the last labour throe, a concatenation of cystic, gelatinous-looking substances came hurriedly forth, and all was ended. There are very few accoucheurs of long practice but have been equally surprised with pseudo-pregnancy, I believe, like myself, in some such instance.

I think, Sir, you are entitled to the thanks of the Profession for your very impartial and judicious remarks in regard to the speculum in your Number for March 20. I am, &c.

A COUNTRY SUBSCRIBER.

MEDICAL ASSISTANTS AND THE BRITISH MEDICAL FUND.

[To the Editor of the Medical Times and Gazette.]

SIR,—At a meeting of the Profession, held in the Philosophical Hall, Birmingham, a week or two ago, to receive a statement from Mr. Hawtayne respecting the British Medical Fund, a resolution was proposed by Mr. Postgate, and, after a trifling alteration, seconded by Mr. Hadley, the purport of it was as follows:—To render, by an alteration of Rule 80 of this Society, assistants who served an apprenticeship to regular practitioners and are engaged by qualified medical men, eligible for membership; and requesting the Directors to consider the subject, and submit it to the members at a general meeting.

I am sorry to say, by a misapprehension of the effects of this resolution, it was lost by two or three votes. Though the resolution itself is dead, and, it is to be hoped, with it some of the arguments urged against it, yet this is no reason why the case of medical assistants should not be considered. I cannot see, Sir, on what grounds a class of individuals, hard working, many very deserving, ill requited for their services, who are often acting as practitioners to unions, etc., for their employers, and paid by a pittance of from 25*l.* to 30*l.* per annum, can be justly excluded from a Benefit, Benevolent, and Assurance Society, and prevented securing the provision such an institution affords for sickness and ill-health.

An assistant gains nothing in position by connexion with this Society; it gives him no qualification, but simply an opportunity of obtaining, like the rest of unfortunates, the right to the advantages he has paid for. I hope this subject will meet the benevolent eye of Dr. Forbes and the Profession in those towns Mr. Hawtayne may yet visit, and be favourably received.

Birmingham. I am, &c. M.R.C.S.

MEDICAL PROVIDENT INSTITUTIONS.

[To the Editor of the Medical Times and Gazette.]

Sir,—I was one of those who heard the sermon preached at St. Martin's-in-the-Fields, by the Rev. Mr. Mackenzie, in aid of the funds of the Medical Benevolent College.

There was much force in the preacher's appeal to the public in behalf of men whose services he rightly described as always welcome when needed, though often forgotten when the danger is past. It was gratifying to hear a testimony to our character for humanity in the hour of need freely and feelingly given, and to know that the praise was not undeserved. It was both philosophical and charitable in the preacher to attribute our occasional improvidence to the expediency of early marriage, to the absorbing character of our pursuits, and the eminently hopeful nature of our professional temperament.

But I own I did feel deep regret in reflecting, that for such a profession, so humane, so earnest, so hopeful, and so domestic, so varying in its successes and its failures, there should be an appeal making to the public, while so many of its own members are neglecting the most obvious duty of contributing to the necessities of the widows and orphans of their great brotherhood.

The Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity—such is the cumbrous name which at least has the merit of putting the case pretty definitely before us—was founded in 1788, and contains only about 360 members out of the 1500 or 1600 practising within its limits. What this Society has done, and is doing, this is not the time nor the place to tell; but it is the bounden duty of every one of us to inquire. I for one sincerely hope and believe, that the exertions made to promote the laudable objects of the Medical Benevolent College may have the effect, among others, of putting to every qualified practitioner this home question, What have you done, as a member of our great brotherhood, for the widows and for the orphans, of whom some assuredly will need help? It may be your own widow or child; if so, are you not bound to secure them against want. It may be, they are beyond the possible, or most remotely probable need of such help: if so, if it does not concern you or them personally, "What thank-offering do you owe for such a blessing?"

I am, &c. Jacob.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. Hodgson, Esq., F.R.S., President, in the Chair.

CASE OF INVERSION OF THE UTERUS AFTER PARTURITION PROVING FATAL IN EIGHTEEN MONTHS.

WITH A TABULAR STATEMENT OF THE RESULTS OF CASES TREATED BY OPERATION.

By J. G. FORBES, Esq.

The patient, a lady, 25 years of age, came under the care of Dr. Robert Lee and the author, in December, 1850, being in appearance intensely anæmic, and suffering from the usual symptoms attendant upon this state, as well as from periodical attacks of profuse uterine hæmorrhage. On examination per vaginam, a tumour of a pyramidal shape was detected projecting for about two inches through the os uteri, with which it appeared in close connexion throughout its entire circumference. Her confinement had taken place in the country in April of the same year, and an account of it was furnished to the author by her medical attendants. Owing to the cessation of pain, ergot was administered, the os being fully dilated; and a loop of the cord having descended in advance of the head, the forceps were employed to complete the delivery. The infant was still-born. Nothing unusual was apprehended until several days after the labour, when the patient stated, that during the action of the bowels on the third day, "something had come down." It was now discovered that the uterus was inverted, having descended to within an inch or two of the labia. Re-inversion was found to be impracticable. Slight sanguineous discharge continued up to July 12, on which day profuse hæmorrhage took place. This recurred afterwards at each catamenial period, the discharge being often of a serous character, and was accompanied with hysteria, headache, vomiting, constipation, and great exhaustion. On December 18, Dr. Locock was called in consultation, and the propriety of applying a ligature around the tumour for the purpose of extirpating it was discussed; but, owing to the diminution of hæmorrhage, at that time it was not done. The pain produced by pressure on the tumour, precluded all hope of accomplishing its reduction. The treatment adopted was therefore only palliative. In April, 1851, the patient returned to the country, when, after the lapse of some months, her health began to improve. The hæmorrhage also ceased, for the last three catamenial periods of her life were passed over with only a moderate amount of discharge. The period which commenced early in November was attended with intense headache, which, in spite of remedies, increased; erysipelatous redness of one side of the head and neck came on, and the patient gradually passed into a state of coma, under which she sank and died on the 10th inst. A *post-mortem* examination disclosed incomplete inversion of the uterus, the tumour not being constricted by the os. The left ovary was enlarged, and contained a cyst filled with sanguineous fluid. The paper then contained some remarks on the question of attempting the extirpation of the inverted uterus in such cases by operation, a few observations being made, first, on those cases in which no operative proceeding was resorted to, and then upon the several modes of operating which have been practised, and their results. Some cases, it was stated, underwent spontaneous re-inversion, and in others the vitality of the tumour was destroyed by inflammation or by the constriction of the os uteri, and the patients recovered. The difficulty in accomplishing the reduction of the uterus after the lapse of a few hours was then spoken of, and a few cases were quoted in which it was effected at later periods. The duration of life under inversion of the uterus was then considered, and Mr. Crosse's statistics were referred to. Cases in which extirpation of the uterus was performed by excision, or by a ligature alone, and by both combined, were next quoted, and a summary was given of the table appended to the paper. In the latter, which contained brief details of thirty-three cases, collected from different sources, it appeared that nineteen were successfully treated by ligature, and five unsuccessfully (three died); one successfully and two unsuccessfully by excision; and five successfully and one unsuccessfully by ligature and excision combined. The paper was concluded by a general statement of the treatment pursued in the case detailed.

The President said, that, some years ago, he had a patient under his care with inversion of the uterus, which very much resembled the case described in the paper, only the inversion was more complete, the organ appearing externally as a small pyriform tumour. It bled almost continually, oozing constantly, the discharge being greater at the period of the catamenia. He recommended the removal of the organ, but his patient refused her consent, and left the hospital. He heard subsequently that she died consumptive a year afterwards. He had then very great difficulty in obtaining any information about such cases from books; and if this paper, and the tables more especially, which were very valuable, had then been in existence, it would have saved him a great deal of trouble. What information he had been able to gain was not much, and it was scattered and diffused among a great number of books.

Mr. Arnott had seen two cases of inversion of the uterus, and, as with reference to the point raised by Mr. Gregory Forbes—the propriety of surgical interference in such cases—the limited experience of one man was not sufficient, but the combined knowledge of all was requisite, he would follow the example set them by the President, and give an account of them. Some few years ago he had been requested to take charge of a case, represented by some as a polypus uteri, and by others considered to be a slight inversion. The patient was 27 years of age. She had been confined a year previously, and there had been considerable flooding, which continued for four months, and kept her to her bed. Up to that time she was incapable of any exertion. Some other medical men were then called in, besides the gentleman who had previously attended her, and there was a difference of opinion as to the nature of the case. Some said there was a polypoid growth, others that there was inversion. After the application of a ligature the flooding ceased; but the patient did not get well, nor strong, and at last she came to London for further advice, and was placed under his (Mr. Arnott's) care. On examination, he found a tumour in the vagina, which resembled a polypus. The pedicle was surrounded by the cervix uteri, and there was no increased sensibility; and, from these circumstances, the idea in his mind was that it was a polypus. Other medical men also saw the case, and he (Mr. Arnott) might mention, that a distinguished accoucheur also looked upon it in that light; but still a doubt was entertained, and it was proposed that chloroform should be exhibited, and that the pedicle should then be brought down, and a finger be passed into the rectum to feel for the uterus. If it were shown to be a polypus, it was to be removed at once. All this was done, as was proposed, and the uterus was felt through the walls of the rectum. It was then decided to remove the tumour; but, still doubting, he determined to proceed cautiously. One or two small incisions were made, and he saw an opening, into which a probe being passed, it entered into the cavity of the abdomen.

He then applied the ligature, as he had intended, but bleeding still continued, and two or three were applied. Six or eight ounces of blood were lost. Peritonitis set in, and the patient died. The case, he thought, was instructive, as showing the necessity for great caution in all such cases. The tumour presented all the characters of polypus, except the important fact, that it occurred after delivery. But what was the tumour which was felt through the rectum, while the supposed polypus was exterior to the vagina? It was probably a portion of the uterus which had not been drawn down, and perhaps a more cautious examination would have shown such to be the fact. With regard to the treatment, he was disposed to consider the application of the metallic ligatures the best, tightening them slowly. If such a case were to occur again, he should adopt that practice; and such was the deduction he should draw from Mr. Gregory Forbes' Tables. He had seen another case, which was under the care of Dr. West. There was copious bleeding from time to time, and the patient died worn out and exhausted, no operation having been performed, although it was proposed.

Dr. Murphy remarked, that the case related by Mr. Arnott was one within his own (Dr. Murphy's) recollection, as one he had had an opportunity of examining; it shows the extreme difficulty of forming a correct diagnosis. It reminded him of a difficult case that had occurred to Velpeau, who considered the disease an instance of prolapse of the uterus, in which opinion some other practitioners agreed. Pessaries were used accordingly, but the case ended fatally, and the supposed prolapse was found to be a polypus. He (Dr. Murphy) was inclined to attribute inversion of the uterus, when it occurs, to the want of proper attention during labour. It never occurs in the great midwifery hospitals in London, Dublin, Vienna, or elsewhere. The history of such cases, during the labour immediately preceding the inversion, is generally very obscure. A case has been recorded by the late Mr. Crosse, of a lady under the care of the late Mr. Martineau, of Norwich, who was accustomed to have very rapid confinements; she was lying on a sofa, and made a change of position. This caused a very violent pain, by which the infant was born, and was followed shortly afterwards by several others. The medical attendant made an examination, and found inversion commencing, the fundus uteri coming down. He interfered, and, by his manipulations, restored the organ. He (Dr. Murphy) thought, therefore, that it was owing to the want of proper attention that inversion occurs. After it has happened some time, the same permanent contraction of the organ takes place as would have happened if the inversion had not occurred, and this adds to the difficulty of restoring the organ. It is impossible to overcome this constriction, but it may be increased by the means used to conquer it, and inflammation even may be set up. It is said, that the organ sometimes gradually restores itself, but this, he thought, was owing to the gradual reduction in size of the previously gravid uterus which ordinarily occurred, and not to a real restoration of the uterus. He believed that he might state, that if the inversion were not reduced in a few hours, it becomes impossible to do so afterwards, and then arises the question as to the propriety of a surgical operation, whether the chances of life being preserved are greater after the operation has been performed than without it. This question he should leave for the consideration of surgeons; but he thought it possible that improvements in surgery might be such as ultimately to enable them to remove that organ (the uterus) with as much safety to life as any other part. It should be remembered that it is not an organ the preservation of which is essential to the persistence of life, and if it can be removed with safety under those circumstances, it is better to do so.

Dr. W. S. Merriman related a case of inversion of the uterus that had occurred in his father's practice, in which the operation was performed, the case ending fatally. He thought that if all the cases in which an operation had been had recourse to were published, the failures would be found to be quite as numerous as the cases of success. He inquired whether chloroform had been employed as an adjuvant to the reduction of the inverted organ. He thought it might be so used with advantage.

Mr. Arnott remarked, that if all the cases in which an operation had been practised were not on record, the fault lay with those who had neglected to publish their fatal cases.

Mr. W. F. Barlow mentioned a case of inversio uteri under his father's charge, which had been successfully reduced, but he was unable to say how long after it had occurred.

Dr. Tyler Smith was sorry to hear Dr. Murphy attribute the occurrence of inversion to the fault of the midwifery practitioner, as cases were on record in which the uterus had become inverted, while the patient was perfectly quiescent. Cases of inversion had been met with in non-pregnant women, and one, at least, in which the patient was a virgin. He (Dr. Smith) believed its occurrence was owing to the muscular action of the uterus, exerted in a manner similar to that by which intus-susception is produced. He would join with Dr. Merriman in the suggestion, that chloroform should be used in such cases, because he had been able to remove the placenta under its use, after twenty-four hours' retention, when, he was assured, no other remedy would have been of service. He regretted it had not been employed in the case before the Society, when the attempts at reduction had caused an accession of pain. In veterinary surgery, an instrument, consisting of a ball and a rod, was used with great success, as it affords greater power over the uterus than was obtained with the hand only.

Some short space of time having elapsed after Dr. Tyler Smith had concluded his remarks, and no one attempting to address the Society,

The President said, he should much regret if the discussion were then to close without further information being afforded on this important subject. In his case, the inverted uterus could not have been mistaken for a polyp of the organ. He would ask the accoucheurs present what was the latest known period at which the reduction of an inverted uterus, occurring after delivery, could be effected? Also, whether partial inversion does not take place, the whole organ not being engaged? The cases adduced by Mr. Gregory Forbes would show that the success of the operation is much greater than would have been expected; and if they are to be relied on, it ought to be performed, at all events, at an early period of life. Its performance then would not only be justifiable, but essential, for, as he believed, otherwise all these cases would end fatally.

Dr. Locock remarked, that cases of inversion of the uterus are, happily, of very rare occurrence; it is not possible for any one to see enough of them to deduce a rule for practice, except by combining his experience with that of others. Some of the observations that had been made required notice, particularly the question put by the President, as to the time when the reduction can be effected. In one instance the uterus had been inverted three days before it was found out. The uterus was very bulky, and there seemed to be a facility of reduction, which really did not exist. The attempts at reduction were attended with very great pain, and vomiting was brought on; and, as there seemed to be a risk of rupture occurring at the upper part of the vagina, further efforts were desisted from. It was attempted again three or four days afterwards, but again failed. He thought that chloroform would not be applicable, unless used within a very short time after the accident. The uterus in chronic cases is not in a state of spasm, nor is it elastic, but perfectly solid, as in the unimpregnated state, and then there is great danger in attempting reduction. The cases where efforts at reduction are followed by success, are those in which they are employed within an hour or an hour and a half after the accident has occurred. He had succeeded in restoring an inverted uterus under these circumstances In one case where the uterus was inverted, and out of the vagina, no one had been near the patient, nor pulling at the cord. The placenta was peeled off, and then there was no difficulty in replacing the organ. Another very sad instance occurred fifteen or sixteen years ago, and he (Dr. Locock) was called in. Two medical men had been trying, as they thought, to remove the placenta, but it was, in fact, the uterus they were pulling at. The patient was dead when he got there, and to save appearances, he removed the placenta, and replaced the uterus. He (Dr. Locock) had seen altogether five cases of inversion of the uterus; in some of which it had certainly resulted from pulling at the cord; in another it came on accidentally. Inversion may occasionally be caused by the presence of a polypus; there is, or there ought to be, a preparation in the museum of St. Thomas' Hospital, presented by Dr. Hooper, in which inversion of the womb was caused by the existence of a small polyp, and he (Dr. Locock) had seen a very small one produce such violent efforts at expulsion, as to resemble the severest labour-pains; on examination, he had found the uterus bulging down in commencing inversion. The removal of the polyp was followed by the restoration of the uterus. With regard to the removal of the organ, when chronically inverted, that he (Dr. Locock) thought very doubtful still; he had seen the case under the notice of the Society, and also that described by Mr. Arnott, and he believed that it was doubtful whether Mr. Gregory Forbes' patient died from the effects of the inversion. In Mr. Arnott's case, from the doubts entertained as to the nature of the tumour, he thought it was a very unfair one for the operation; there had been great manipulation, and a ligature had been applied, which was removed on account of the pain it caused, so that, when the uterus was drawn down, its surface was covered with a thick layer of semi-purulent fluid, and the patient was, besides, in a very unhealthy state. When he considered that so much can be done to minister to the patient's

comfort, and, by styptics, etc., to relieve mischief, he thought the operation was of too formidable a nature to be lightly undertaken. It is not a difficult one to perform, but the danger of inflammation from wounding the peritonæum is very great.

Dr. W. S. Merriman asked Dr. Locock whether he thought chloroform would be of use in cases where the inversion had existed for three days only?

Dr. Locock had only spoken against its use in chronic cases of inversion: it would prevent the expression of pain, for instance, which is an essential guide for the persistence or discontinuance of the efforts at reduction.

Dr. Murphy explained his meaning as to the improvements of surgery enabling them hereafter to remove the organ with greater safety than at present, by improvements in the instruments, such as the metallic ligature spoken of by Mr. Arnott, etc., in the time of operating, and in such matters, and not as regards the mere surgical performance of the operation. It is, however, he said, a question for surgeons only, who could best decide on the matter.

Dr. Snow had no doubt that the inhalation of chloroform would be very useful in facilitating the reduction of an inverted uterus. He did not participate with Dr. Locock's objection as regards the pain; with respect to too much force being used, if the expression of pain be lost as a guide by the use of chloroform, he thought that the medical man ought to be able to judge for himself the amount of force he should employ, and that he would do so much better from his own knowledge, than from the cries uttered by his patient while undergoing the efforts at reduction. In this operation that objection must give way, as it had done in all others where it was previously advanced, such as lithotrity, where its use was opposed lest the bladder should be unconsciously injured. He (Dr. Snow) thought the inhalation of chloroform would materially assist the surgeon's hand in reducing the inverted uterus.

Mr. Ch. Hawkins had not intended to join in the discussion, but he could not remain silent when he heard Dr. Snow say that surgeons objected to the use of chloroform in lithotrity for fear of injuring the coats of the bladder. He must say, he had never heard of such an objection to its use. He certainly did object to its inhalation in those cases, but not on that account, but because it was advisable to ascertain how long they could endure the breaking up of the calculus.

Mr. Quain inquired, what service chloroform could render in these cases, when its action on the uterus was merely to remove the pain, and not to check its expulsive action? Chloroform was constantly employed in midwifery, and recommended solely on the ground, that it does not interfere with the expulsive action of the organ;—of what service, then, could it be in these cases?

Dr. Snow explained, that chloroform, when given in its full dose, will arrest uterine action, as well as remove the pain, so that the surgeon can then pass his hand into the uterus, and turn the child. In a smaller amount it does not arrest uterine action. While there is still contraction of the uterus, inversion of that organ may therefore be relieved under its influence. It will be of no use, of course, when the organ has become solid. He was then about to explain his views respecting his remarks on lithotrity, when he was stopped by the President, on the ground that he was wandering from the subject. The President added, that a good deal of the latter portion of the discussion had been irrelevant.

The meeting then adjourned.

MEDICAL NEWS.

Royal College of Physicians.—At the quarterly meeting of the Comitia Majora, held on Monday, April 5, the following gentlemen, having undergone the necessary examinations for diploma, were admitted members of the College:—

Folkard, Dr. Henry, Old Brompton.
Liebermann, Dr., Clapham-road.
Prout, Dr., Royal Hospital, Chelsea.
Salter, Dr., Montague-street, Russell-square.
Mr. Osborn, Southampton, was admitted an extra-licentiate.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College at the meeting of the Court of Examiners on the 2nd inst.:—

Haynes, William, Hon. East India Com.'s Service, Bengal.
Lee, Charles, Woodbridge, Suffolk.
Crossley, Charles Richard, Ashby-de-la-Zouch, Leicester.
Grylls, William Richard, Sydney, New South Wales.
Burke, John Mathew, London.
Curgenven, John Brendon, Highgate.
Jeeves, William Young, Sharrow Grange, Yorkshire.
Symmons, Robert Francis, Bures, Suffolk.
Izon, Iaberson, Birmingham.
Evans, William, Anglesey.
Carr, George William, Kincardine, Upper Canada.

Fellowship Examinations.—At the examinations on Monday and Wednesday last, the following questions were submitted to the senior candidates in Anatomy and Physiology, viz:—

1. Describe the position and relations of the abdominal viscera.
2. Describe the parts concerned in inguinal and scrotal hernia, and their relative position in the direct and oblique varieties.
3. Describe the characters and offices of the different membranes of the brain. Enumerate the processes of the dura mater and the sinuses connected with it; and describe the situation of each of them.
4. Describe the position of the brachial artery at the bend of the elbow, and of the several parts with which this vessel is in relation.
5. Describe the muscles and tendons passing over and immediately connected with the capsule of the hip-joint, and their position relative to each other.
6. Describe the relative position and attachment of the muscles of mastication, and explain the several stages of the process of deglutition.

The following questions on the same subject were submitted to the junior candidates:—

1. Describe the dissection of the several layers of the sole of the foot.
2. Describe the situation of the ganglia of the sympathetic nerve in the head and neck, and the connexions of that nerve and its ganglia with other nerves in those parts.
3. Describe the structure and functions of the skin.
4. Describe the intestinal apparatus by which the chyle is absorbed into the circulation, and state the changes it undergoes during its conversion into blood.
5. Describe the minute structure of the lungs, and the function of respiration.
6. Describe the minute structure of the kidney, and its function.

The following questions on Pathology and Surgery were submitted on the 7th inst.:—

1. Scrofulous disease of the spine; its original seat; the parts involved in its course; its symptoms, results, and prognosis. Treatment, local and constitutional, of the several stages.
2. Injuries with which fractures of the os innominatum may be confounded; how they are to be distinguished from each other. What other parts usually injured in fractured pelvis. Prognosis. Treatment.
3. Affections of the breast during lactation; their diagnosis, course, and treatment.
4. Kinds and causes of gangrene; symptoms; when attacking a limb, under what circumstances may amputation be performed?
5. Symptoms and treatment of syphilitic iritis.
6. Symptoms and treatment of wounds inflicted by poisonous animals.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 1, 1852:—

Bellin, William Field, Great Yarmouth.
Birks, George Vause, Manchester.
Couch, Thomas Quiller, Polpero, Cornwall.
Crossley, Charles Richard, Ashby-de-la-Zouch.
Henger, Alfred, South-street, West-square.
Lomax, Arthur Robert, Hereford.
Mathews, Henry John Davis, Denmark-hill.
Nelson, Joseph Dunn, Exeter.
White, Thomas, Chester.

Military Appointments.—2nd Regiment of Dragoon Guards, Surgeon Edward Mockler, from the 57th Foot, to be surgeon, vice Alexander George Horne, M.D., who retires upon half-pay; 2nd Dragoons—Acting Assistant-surgeon James Tekell Armstrong, to be assistant-surgeon, vice Brush, promoted on the Staff; 57th Foot—Staff-surgeon of the 2nd class, James Dickson, to be surgeon, vice Mockler, appointed to the 2nd Dragoon Guards; Hospital Staff: Assistant-surgeon John Ramsay Brush, M.D., from the 2nd Dragoons, to be staff-surgeon of the 2nd class, vice Dickson, appointed to the 57th Foot. Commissions signed by the Lord-lieutenant of the West Riding of the County of York, and of the City and County of the City of York—1st West York Regiment of Yeomanry Cavalry—John Barber, to be surgeon, vice Taylor

deceased; Robert Thomas Cook, to be assistant-surgeon, vice Square, resigned.

Medical Appointments and Vacancies.—Dr. Wilks has been elected one of the physicians to the Surrey Dispensary. At the West Norfolk and Lynn Hospital a house-surgeon and secretary is wanted; salary 50*l.* a-year, with board, lodging, and washing. Testimonials on or before the 10th; date of election, the 20th inst. At the Salford and Pendleton Royal Hospital and Dispensary, Manchester, an assistant house-surgeon is required, who must be L.S.A. Duties: to dispense medicines, attend in the absence of house-surgeon, and visit the home patients, if required. Salary 80*l.* a year, with apartments. Date of election, 16th inst. A house-apothecary wanted at Adden-brooke's Hospital, Cambridge, Mr. H. Mitchell having resigned. Salary 86*l.* a year, with board and lodging. Date of election, 21st of May. Dr. Hassall has been appointed physician to the United Kingdom Life Assurance Company. In the Steyning Union a medical officer is wanted for the eastern division of No. 1 District. Salary 40*l.* a year, with 1s. 6d. each successful case of vaccination, 10s. for each midwifery case, and the Poor-law Board fees for accidents and operations. Date of election, the 14th inst.

Robert Lee, M.D., F.R.S., has been appointed Physician to the Royal Naval and Military Insurance Company, in the room of Sir Charles Fergusson Forbes.

Obituary.—On the 31st inst., at 28, Sussex Gardens, George Chenevix, Esq., of Ballycommon, King's County, Ireland, formerly surgeon-major of the Coldstream Guards, in his 57th year. On the 30th ult., at Stanhope-street, London, Thomas Henry Payne, Esq., aged 38, formerly of Frome, Somersetshire. He had taken several voyages in the hope of re-establishing his health, but only lived three weeks after his landing in England from Madras.

Pathological Society of London.—At the last meeting of this Society, on the 6th inst., Dr. Taylor, of Guildford-street, and Dr. Ely, of Rochester, were elected members; and Dr. Theophilus Thompson, W. H. Allchin, M.B., and C. M'Shane, Esq., R.N., of Greenwich Hospital, were admitted as candidates for membership.

Professor Brande's Retirement from the Royal Institution.—On Saturday last, after delivering his lecture on the branches of organic chemistry connected with malting, brewing, and wine making, Mr. Brande, in an affecting address, took leave of the members of the Royal Institution. This eloquent lecturer and highly distinguished chemist began his career as Professor of Chemistry at the Royal Institution in the year 1812.

Dr. Findlay, late surgeon of the Alecto, on the Coast of Africa naval station, is coming home invalided.

Charity for Hospital Purposes.—The late Mrs. Anna Maria Ogle, of Eaton-place, Belgrave-square, having bequeathed the sum of upwards of 7000*l.*, in trust to Sir C. Ogle, Bart., and Mr. Denton, to be distributed for charitable purposes, those gentlemen have selected certain charities to share in the amount, among which are,—the Verral Spinal Charitable Society, 500*l.*; the Royal Westminster Ophthalmic Hospital, 470*l.*; the Small-pox and Vaccination Hospital, 470*l.*; the Metropolitan Convalescent Hospital, 470*l.*; King's College Hospital Building Fund, 500*l.*; Westminster Hospital, 470*l.*; and City of London Truss Society for the Ruptured Poor, 500*l.*

The remains of Sir C. F. Forbes, M.D., whose decease we recorded last week, have been deposited in the catacombs, Kensall-green.

A Deputation, composed of the principal officers non-medical, of the royal hospitals of London, had an interview with Mr. Secretary Walpole at the Home Office on the 2nd inst. Although their business, as is usual, was not stated, it may be guessed that their object was to obtain the withdrawal of the establishments with which they are respectively connected, from the Charitable Trust Commission, to be appointed under the Bill now in progress through the Houses of Parliament.

Testimonial to Dr. Conolly.—A meeting of the friends of Dr. Conolly was held in Willis's Rooms, King-street, St. James's-square, on Wednesday afternoon, the 31st ult., to present to that gentleman a testimonial of their acknowledgments for the manner in which he has advanced the cause of humanity, by showing how easily the insane may be efficiently managed without resorting to restraint. The Right Hon. the Earl of Shaftesbury presided; and, having pointed out the success which had attended the efforts of Dr. Conolly in ameliorating the condition of the insane at Hanwell—and thereby throughout the country—thanked him for having shown to the world that the insane might be treated as human beings, and that they might be even, in many instances, brought to an understanding of the beauties and advantages of religion and Christianity. The noble Earl then presented to Dr. Conolly the testimonial, which consisted of a beautifully-executed and striking three-quarter-length portrait, painted by Sir John Watson Gordon, P.R.S.A., R.A.; an equally well executed engraving of the portrait, in mezzotinto, by Mr. William Walker, intended for presentation to the subscribers; and a piece of plate, consisting of groups of figures placed on and around a pedestal, which also bears the inscription: the figures being intended to shadow forth the labours on account of which the testimonial is presented. This piece of plate, which stands about two feet high, and is valued at 500 guineas, was produced from the *atelier* of Messrs. Hunt and Roskell, having been designed and executed by Mr. Alfred Brown, and may be fairly pronounced a masterpiece of art. On the summit, the God or genius of the Healing Art is represented in a standing posture, as meditating and directing the improved treatment of the insane, with Mercy on his right hand, and Science on his left. Some of the evils to be remedied, the mode of relieving them, and the results, are illustrated by the groups of figures around the pedestal and in the reliefs on its base. The groups exhibit a male and female figure, representing Melancholy and Raving Madness under restraint; a patient relieved from restraint, in a state of partial recovery, with the implements of coercion thrown on the ground; and the same patient restored to reason, and surrounded by his family, to whom he is gratefully indicating the sources of his restoration in the group above. The whole stands on an elegant polished ebony pedestal, in which is inserted in silver two bas reliefs, showing in contrast the past and present mode of treating the insane. The plate also bears the following inscription:—

This Testimonial,
Commemorative
of his
Strenuous, Persevering,
and
Successful Labours
To Improve the Treatment
and
Ameliorate the Condition
Of the Insane,
is
(Together with a Portrait of Himself)
Presented
by his
Admiring and Grateful
Contemporaries,
to
John Conolly, M.D.,
Physician
To the Hanwell Lunatic Asylum.
A.D. 1852.

Dr. Conolly, at great length, returned thanks, and stated that he was only a follower in the footsteps of Pinel and Tuke, the truth of whose principles had been of late years evidenced by many eminent authorities; and the more especially at Lincoln, by Dr. Charlsworth and Dr. Gardner Hill. When he first adopted the system of non-restraint, he was told he should run great risk of his life from the fury of his patients; but he was happy to say, he had never received even a blow from one of them; and such a thing as a strait-waistcoat, or any other form of restraint, was unknown at Hanwell. Dr. Conolly also acknowledged the great assistance he had received in carrying out his plans from the officers of the Institution and the Middlesex magistrates, and expressed a hope that his life might be spared for the purpose of teaching young medical students the principles of the system, in which he was only an humble follower of others, and that it might be extended throughout the kingdom. Votes of thanks having been given to the Committee of Management, the Treasurer, the Hon. Secretaries, and the noble Chairman, the meeting separated.

Progress of Epidemics.—The weather in British Guiana, it is reported, has been very favourable to the planters, but exceedingly sickly for the general community, many deaths having taken place among the shipping, the Portuguese, and the newly-arrived Europeans. The Gibraltar Board of Health has decided that arrivals from Brazil should be ordered to quit the port, a malignant fever being prevalent in that country.

Jamaica.—Courts-martial have been held on Mr. Doak, surgeon, and Mr. G. A. Hallion, assistant-surgeon, of the Inflexible, for drunkenness. The surgeon has been placed at the bottom of the list, and the assistant-surgeon dismissed the service.

By the new regulations as to rates of costs and expenses at the Central Criminal Court Sessions at the Old Bailey, in Middlesex and Westminster prosecutions, medical men bound by recognizance, or subpœnaed, and attending professionally, are to be allowed one

guinea per day only, with 3d per mile each way, if residing more than five miles distant from the Court. For their attendance before the committing magistrate, they must obtain his certificate, or they cannot claim their fees.

A Martyr to Science.—A physician in Prague has just died a real martyr to science. He had been in the habit of taking strong doses of poison, after swallowing an antidote, in order to note the effects. On the 23rd ult. (Qy., Feb.) he took so large a quantity of morphia, that all the efforts of his medical friends present at the exhibition could not save him. Some years back it was a fashion among the medical men in Italy to experimentalize in their own persons on the action of medicines and poisonous drugs, and invitations to take a dose of digitalis, henbane, or opium, were as rife in the medical *coteries* as similar *billet-doux* for *tea and turn out* among the other classes of society.

Death, supposed to Arise from Improper Medicine.—An inquest was held lately, by Mr. Carter, on the body of an illegitimate male infant, belonging to Catherine Dwyer, who, having an extensive syphilitic eruption, was made an out-patient at the South London Dispensary, where its mother was supplied with some medicine according to the prescription of Mr. Jones, surgeon, of Blackfriars-road. The mother was directed to take the medicine, in the hope that her milk, being medicated thereby, would influence the child's health. Mr. Henstch, the resident house-surgeon of the Dispensary, proved that the medicine consisted of syrup of iodide of iron, syrup of poppies, and liq. potassæ arsen., with water. He stated, that the medicine could not harm the child, and the jury returned a verdict accordingly.

The Homœopaths.—The Leicester Medical Book Society have resolved unanimously:—"That the Society views with satisfaction the declarations of several professional bodies against homœopathy, and pledges its members alike to repudiate the nonsensical doctrines of Hahnemann and of Priessnitz, and to decline consultation with those who profess such deceptive absurdities."

Child-poisoning.—On the Home Circuit at Lewes, Charlotte Larkin, aged 42, widow, was tried before Mr. Justice Coleridge, for the manslaughter of her infant son by poison. This was one of those cases so frequently occurring in the country, where infants are destroyed by the incautious use of narcotics given to keep them quiet. The prisoner had been in the habit of giving her child a dose of laudanum for that purpose, and, on one occasion, the infant being more restless than usual, she gave him an overdose, the result being fatal. The evidence showed, that the prisoner was attached to her child, and had no idea of the dangerous consequences that were likely to ensue from the administration of the poison. The jury returned a verdict of guilty, and the sentence was three months' imprisonment and hard labour. Juries in general return a verdict of "Not Guilty," on the ground that there was no evil intent; thus encouraging careless persons to endanger life, that they may be, for a time, freed from the charge of a fretful infant. The decision in this case will be useful.

DEATHS *in the Metropolis for the week ending Saturday, April 3*, 1852.

Causes of Death.	April 3. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	561	471	291	1324	9736
Specified Causes	558	469	290	1317	9654
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	158	37	18	213	1688
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	7	35	25	67	483
3. Tubercular Diseases	71	141	7	219	1796
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	65	31	33	129	1277
5. Diseases of the Heart and Blood-vessels	4	37	24	65	346
6. Diseases of the Lungs and of the other Organs of Respiration ...	109	65	75	249	1763
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	19	20	17	56	579
8. Diseases of the Kidneys, &c. ...	...	10	5	15	102
9. Childbirth, Diseases of the Uterus	1	10	...	11	85
10. Rheumatism, Diseases of the Bones, Joints, &c.	2	6	3	11	79
11. Diseases of the Skin, Cellular Tissue, &c.	3	1	...	4	13
12. Malformations	3	...	...	3	23
13. Premature Birth and Debility ...	31	1	...	32	236
14. Atrophy	24	3	2	29	182
15. Age	...	...	61	61	523
16. Sudden	15	18	8	42	160
17. Violence, Privation, Cold, and Intemperance	46	54	12	112	314
Causes not Specified	3	2	1	6	82

TO CORRESPONDENTS.

We have to intimate that, in future, all Communications for this Journal must be authenticated; gentlemen, therefore, who address us must favour us with their names,—certainly not for publication, but that we may be satisfied of their good faith. Henceforth, then, it is to be understood, that when letters are unnoticed, it is because the writer's card did not accompany them.

Ransford Redivivus.—A Correspondent in York has favoured us with the following precious *morceau*, cut by him from the "York Herald," of March 27:—

"Homœopathy in 1851. Edited by J. Rutherford Russell, M.D. Published for the Association, by James Hogg, Edinburgh; and Groombridge and Sons, London. 1852.

"The work before us is one of considerable importance in the medical world, containing a vast amount of information relative to the new practice of physic, which appears to be rapidly advancing in public favour, and which already numbers, among its advocates and practitioners, many talented men, of high reputation, who once were decidedly opposed to it. The volume is neatly printed in 12mo. and is enriched with two plates—one, an admirable portrait of Samuel Hahnemann, the founder of the new system—the other, a beautiful representation of his monument, erected at Leipsic, in August last. The letter-press is arranged under twenty heads, each descriptive of the superiority of the new system to the old; and one of the articles will be found peculiarly interesting to the citizens of York, on account of its containing the reasons of Dr. Ransford (now a homœopathic practitioner in this city), for embracing the new system. Standing high in his Profession, 'Fellow of, and lately one of the Examiners in the Royal College of Physicians, Licentiate of the Royal College of Surgeons," etc. etc., and at that time a most decided opponent of homœopathy and its disciples, he could have no mercenary motive influencing the change—but being ever anxious to search after truth by close investigation, he was soon convinced of the important fact, that the new far excelled the old one; and, under this conviction, strengthened and confirmed by practice, he braved the sneers of the members of the old school, sacrificed the honours which attended him there, and is now extending his usefulness with greater satisfaction to himself, and under a strong conviction that 'truth will prevail' universally over the errors of the past. In short, all the articles in the work are good, and are well worth the perusal of every one who duly values the possession and preservation of health."

The above is evidently written by, or for Dr. Ransford. Indeed, the admirable logical sequences which it contains almost identify its authorship with that of the celebrated "Reasons for Embracing Homœopathy, by Charles Ransford, M.D." Dr. Ransford, or the author of the above little notice, seems to see nothing in the octavo volume but Dr. Ransford: just as in former days he saw nothing in Edinburgh but the aforesaid Ransford; and, by making believe, very much like the small servant of Dickens, came to imagine that he "stood high in his Profession." Who but himself could tell, or, still more, who that had ever known him, but himself, could imagine, "that he was ever anxious to search after truth by close investigation?" that *he* "sacrificed honours," that *he* "braved sneers." We repeat again, this article could be written by some one who knew him, as a newspaper advertisement. No one who knew him but himself would venture to estimate his character: and therefore we are shut up to the conclusion, that the author must be *Dr. Ransford*. But was ever greater nonsense penned? The paragraph in question affirms:—"Standing high in his profession, Fellow of, and lately one of the Examiners in, the Royal College of Physicians, Licentiate of the Royal College of Surgeons, etc., and at that time a most decided opponent of homœopathy and its disciples, he could have no mercenary motive influencing the change." Why not? Notwithstanding his alleged high position, notwithstanding his being an examiner, did he not leave Edinburgh? Was this evidence of a successful practice? Was it not notoriously the reverse? We blame him not for this. It is no proof that he was unskilful in his profession. Every one does not succeed according to his deserts. Nevertheless, it is the fact, that he did not succeed in Edinburgh, nor was he more successful in Alnwick. Those who were invited to fill his place there know and can tell whether the attractions were brilliant: and, these things being so, it is evident that there *may* have been "a mercenary motive influencing the change." That there probably was, facts elsewhere stated, serve, we think, to prove—(see Review of his "Reasons," "Medical Times," No. 70):—1st. His seeking to become superintendent of a Hydropathic Institution before publicly embracing homœopathy. 2nd. His seeking to dispose of his practice at Alnwick after professing to embrace a system which regards regular medicine as a delusion. 3rd. His practising the old system up to the moment of his departure from Alnwick, and after the lapse of a single night commencing the practice of the new one at York. These are serious admissions, which prevent us from feeling the least surprise that this quondam Fellow and Examiner of the College of Physicians of Edinburgh should have reduced himself to the level of the lowest empiric. If we have wasted our time in noticing anything so contemptible, it is that we may more emphatically show how invariably homœopathy allies itself with everything that is mean in the pursuit of professional emolument.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you have the kindness to inform me in your Notices to Correspondents, if a medical man, called to a case of fracture of the skull requiring trephining, and performing the operation, is entitled to his fee for this from the relations, although the patient should die, and he received his fee for his evidence before the Coroner?

By answering this Query, you will greatly oblige M. D.

The surgeon is entitled to his fee from the legal representative of the deceased.

[To the Editor of the Medical Times and Gazette.]

SIR,—Some time ago I put the question, "Whether the practitioners of Ireland would, in the event of their contributing towards the establishment of the 'Benevolent College,' projected by Mr. Propert, be entitled to its benefits?" and you kindly inserted my Query. No authorised reply has been since afforded, and I beg, through your valuable columns, to repeat the question, trusting that it will be satisfactorily answered.

I am, &c., AN IRISH M.D.

The Author of "A New Ball and Socket Swing for Fractures of the Leg," is requested to send his name and address. The drawing has been engraved, but, the author's name *not* being appended to his paper, has been mislaid.

Mr. Bass's letter on Bitter Beer reached us too late for this week's journal, Good Friday obliging us to go earlier to press.

Dr. Fearnside is thanked.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have been for some weeks past rather amused at the remarks made by your correspondent "Justitia." In his last letter he states, that no Member of the College of Surgeons only is eligible for parish appointments: if "Justitia" will take the trouble to refer to that excellent publication of Mr. Churchill's, the "London and Provincial Medical Directory," and just scan the provincial portion of the work, he will there find numerous instances where members of the College only hold appointments as surgeons to parishes or districts, as the case may be; in fact, I know instances where an M.R.C.S. and L.S.A., having been candidates for a parish appointment, the preference has been given to the former. To show to what extent the diploma of the College is held over the licence of the Apothecarie' Company, I beg to refer "Justitia" to the regulations of the Army and Navy Boards and H.E.I.C.S.—that, I think, without any further argument, will settle the matter at once—no man with the Apothecaries' licence can enter any service connected with the English Government—whether he can do so abroad I am not prepared to state.

Members of the College uphold (with very few exceptions) the dignity of the Profession.—I wish I could say as much of the apothecaries. The insertion of this will oblige, I am, &c.

Brixton. A SUBSCRIBER.

P.S. Perhaps "Justitia" will inform me by what right an apothecary designates himself "surgeon."

A Subscriber.—1. We believe an executor is not obliged to pay bills till the expiration of a year from the time of being called on to act. 2. Dr. F. Churchill's.

[To the Editor of the Medical Times and Gazette.]

SIR,—Allow me to ask, through the medium of your valuable Journal, the following question:—

Whether or not am I entitled to a fee of from 1*l.* 1s. to 2*l.* 2s. for attendance at the General Quarter Sessions?

The facts of the case are these:—While attending a long and protracted case of labour, a sprig of the law came to the patient's house, and requested to see me, promising not to detain me for a minute (as I had informed him that I was particularly engaged). On my coming down stairs he served me with a subpœna, to attend the Sessions directly then going on. I was thus compelled to leave my patient (directing them to send for a brother practitioner should they require assistance before my return), and go to the Town-hall. Two cases came on before the case in which I was concerned. The prisoner in my case pleaded guilty. I then left, and returned to my patient. On calling at the Clerk of the Peace's office some time afterwards, I was offered the paltry sum of five shillings only for my attendance, which I refused to take, as I considered it an insult to myself and the Profession at large.

If I am entitled to a fee of 1*l.* 1s. or 2*l.* 2s., I shall be greatly obliged if you will inform me what steps I am to take to recover it.

I am, &c.

ROBERT RANSOM, M.R.C.S.E. and L.A.C.

6, Jesus-lane, Cambridge.

We think our Correspondent entitled to two guineas, and advise him to proceed against the Clerk of the Court by County-court process.

[To the Editor of the Medical Times and Gazette.]

SIR,—Can you afford me a decisive solution of the following point? I was called upon, as union surgeon, to attend a pauper, J. C., about Christmas last, living in my parish A. but derived from, and belonging to, a neighbouring one B. not in the same Union. He proved to be a helpless "ne'er-do-weel," with chronic pleurisy, and a large family, and, after a few weeks' treatment, I felt bound to suggest to the relieving officer that he should be shifted from our parish A. to his own B. and tendered the certificate of permanent disability necessary for such purpose. This was acted upon, and their own liability at once acknowledged by the Guardians of B. who are now paying him a weekly sum, though he persists in residing in our parish. Under these circumstances, am I bound to continue in attendance upon him? Does not the recognition of the case by Board of B at once place it beyond the jurisdiction of Board A? Can the latter, while refusing, and properly, to maintain the pauper, or even to supply the nourishment I order, compel me to afford medicine and attendance which cost them nothing? As a general principle, irrespective of this particular case, can any individual or family ever be entitled to medical relief, and that only? Can they be made paupers *quoad* the purse of the doctor and not so *quoad* that of the Union? Ought there to be any distinctive principle in the granting of orders for medical attendance, and in distributing those for general relief? I am, &c. CAUSTICUS.

P.S.—Do not, in the general principle, lose sight of my individual case. How does the law stand with reference to that?

Whether "Causticus" is bound to attend "J. C.," must be decided by the terms of his agreement with the Board. But that the Board have the power, as a general principle, to give to any individual medical relief, and that only, is, we think, unquestionable.

L. A. C.—We believe it is now impossible to obtain a diploma from any continental university without previous examination. Diplomas are granted at Giessen, without residence, but upon moderate examination, and the production of recommendations from well-known physicians or of published works on medical science.

Verax should apply for such information to the Secretary of the Society. We believe the transaction alluded to is of frequent occurrence.

A Subscriber.—The fees must be deposited before examination. A letter to the Secretary of the Apothecaries' Company will doubtless be answered to our Correspondent's satisfaction.

Abscess of the Uterus.—If our Correspondent means what may be termed Idiopathic Abscess of the Uterus; that is to say, abscess the result of inflammation of the uterine structure, it is unquestionably of very rare occurrence. The question, however, was simply "abscess." Now, this has been noticed as the result of a sub-cartilaginous tumour in the uterine walls; in fact, being Nature's own way of getting rid of the substance: and one of the true cases mentioned by Hooper he thinks arose from this cause, showing the uterus may become distended by an enormous accumulation of pus. Here the diseased membrane of the uterus appears to constitute the walls of the abscess, as the muscular parietes appear perfect, and the organ altogether presents the appearance of the womb of one who has recently been delivered, with the exception, of course, of the rough surface showing the previous attachment of the placenta.

N., of C., denies an adjusting power! He entirely overlooks the facts that every eye has one particular distance for perfect vision, and that the glasses, being adapted to that distance, only admit of perfect vision at one focal distance. As to the discovery he has made relative to relief of surface, he is apparently not aware of the phenomena shown by the stereoscope, which explain the reason why objects cannot be perfectly represented on a flat surface in relief. Secondly, he overlooks, when speaking of the picture seen through the dirty window, the part the mind plays,—now, it is *that* which attributes to a figure dimly seen properties which it does not possess. Thirdly, he is apparently unaware of Bowman's discovery of the ciliary muscle, which is, in all probability, the chief actor in the adjustment. The paper is not suited to the "Medical Times and Gazette." The paper is at our Publisher's for "N., of C."

A Liverpool Practitioner.—In reply to the question, whether it is "in any case possible for a young woman, of correct judgment, to be full six months pregnant (male child, remarkably strong and healthy), and not to know of it," we may state that the thing most assuredly is possible. We do not state the fact as one which has recently become possible under the astonishing effects of chloroform, but as one that has been well authenticated long before chloroform was discovered. We refer our Correspondent to Dr. Montgomery's admirable "Exposition of the Signs and Symptoms of Pregnancy," as giving the best summary of what is known on this subject. "It is a fact," says Capuron, "which experience has more than once confirmed, that a woman may become with child while in a state of hysteria, under the influence of narcotics, during asphyxia, drunkenness, or *deep sleep*, and, consequently, without being conscious of it." The late Dr. Gooch has quoted a remarkable case to show that it is not necessary for a woman to be sensible at the moment of impregnation, but that it is possible for sexual intercourse and impregnation to take place during the deep sleep of fatigue. Dr. Montgomery himself has related a case exactly similar to that given by Dr. Gooch, which was communicated to him by Mr. Cusack:—"A servant woman at a hotel in Nenagh proved pregnant, and solemnly declared that she was not conscious of having had intercourse with any man. Suspicion, however, fell upon an ostler in the establishment, who subsequently acknowledged that he believed he was the father of the child: that having found the woman in a deep sleep from fatigue, caused by long-continued exertion, and being kept out of bed two or three nights in succession, he had connexion with her, and, as he believed, totally without her knowledge, as she did not evince the slightest consciousness of the act at the time or recollection of its occurrence afterwards. The parties were married by mutual consent." We refer the *Liverpool Practitioner* to the whole of Dr. Montgomery's 11th chapter.

COMMUNICATIONS have been received from—

Mr. ALLSOPP, of Burton-on-Trent; Mr. BARLOW, of the Westminster Hospital; AN IRISH M.D.; Dr. CANHAM, of Ramsgate; Mr. CLENDON, of Albemarle-street—On the RECENT DEATHS from CHLOROFORM; Mr. HENRY LEE, of Dover-street and King's College Hospital—On PURULENT INFECTION of the BLOOD; Mr. HORSELEY, of Cheltenham—On ALBUMEN and ARSENIC; Mr. RANSOM, of Cambridge; M.D.; Dr. HALL, of Sheffield—On the ADMINISTRATION of CHLOROFORM; TYRO; A VICTIMISED GENERAL PRACTITIONER; Dr. HECTOR GAVIN; Mr. JACOB BELL, M.P.; Dr. MACKENZIE, of Chester-place, Hyde-park—CASE of FARCINOMATOUS INFLAMMATION of the FOOT; Mr. BASS—On BITTER BEER; Mr. HENRY SMITH, of Caroline-street—A SUCCESSFUL CASE of LIGATURE of EXTERNAL ILIAC, and SUPERFICIAL FEMORAL ARTERIES in the same SUBJECT; Dr. FEARNSIDE, of Preston; Dr. COTTON, of Clarges-street; JACOB; M. B.

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LECTURES.

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FORENSIC MEDICINE—Dr. Raly.
MIDWIFERY—Dr. West.
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Further information may be obtained from Mr. Paget, or from any of the Medical Officers or Lecturers.

Medical Society of London.—The

subjects for the TWO FOTHERGILLIAN GOLD MEDALS offered for Competition by this Society for MARCH, 1853, are—

FOR THE FIRST.—"Wounds and Injuries of the Abdomen and their Treatment."

FOR THE SECOND.—"The Pathology of Convulsive Action."

The SUBJECT for the FOTHERGILLIAN GOLD MEDAL for MARCH, 1854, is,—

"Diseases of the Fœtus in Utero, not including Malformations."

Candidates for these Medals are informed, that practical and original facts and illustrations will be considered as especial merits in all Essays sent in for competition; which Essays must be written in the English or Latin Language, copied in a fair and legible hand, and delivered at the Society's Rooms, 32A, George-street, Hanover-square, on or before the 1st of November, preceding the award, with a sealed packet, containing the author's name, and having on the outside a motto or device, corresponding with a motto or device on the Essay; that any Essay in the author's handwriting, or with his name affixed, or which may in any way discover him, will be excluded from competition; and that the Prize Essay will become the property of the Society.

The Society also offers for competition Two Silver Medals annually, for papers considered worthy of that distinction, and contributed respectively by an ordinary Fellow, and an Honorary or Corresponding Fellow, or author not a Fellow.

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C. H. F. ROUTH, M.D., } Hon. Secs.
C. COGSWELL, M.D., }

*** The Fothergillian Medal for 1852 was awarded to F. W. Headland, Esq., B.A., for his Essay "On the Mode in which Therapeutic Agents Introduced into the Stomach produce their Peculiar Effects on the Animal Economy."

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ORIGINAL LECTURES.

LECTURE IN CLINICAL SURGERY,

AT

Guy's Hospital.

By BRANSBY B. COOPER, Esq., F.R.S.,
Senior Surgeon to, and Lecturer on Surgery at, Guy's Hospital.

HYDROCELE.

Gentlemen.—I select for the subject of the present clinical lecture a case of hydrocele of the tunica vaginalis. There is nothing very remarkable in the case itself; it presented originally all the usual characters of the disease. The history which I shall read to you is that which you will hear in almost every case of the kind, and it is a complaint of common occurrence; nevertheless, the diagnosis of hydrocele is sometimes attended with extraordinary difficulties, consequently I am desirous of bringing the subject before you, and shall therefore enter into a detailed account of the varieties and peculiar phases of the disorder. The case upon which I shall found my subsequent observations is as follows:—

J. H., aged 35, was admitted into Guy's Hospital with a pyramidal swelling on the left side of the scrotum; it was about double the size of the opposite side, and presented a uniform smooth surface. The apex of the pyramid was situated near the external abdominal ring, and it was evidently unconnected with the spermatic cord, which remained of its natural size and condition in every respect. The whole tumour was elastic and perceptibly fluctuating. Upon bringing the patient into a darkened place, and holding a light behind the tumour, its transparency became immediately evident, and the testicle could be seen distinctly occupying a position posterior to, and a little below, the centre of the tumour. When the swelling was pressed at this point, the patient experienced a sensation similar to that felt when a testicle is squeezed. When the patient came into the hospital he stated, that about two months before, he had struck the testicle against the handle of a truck; that he suffered some pain at the time of the accident, but this passed away, and in the course of a few days he had forgotten the occurrence: for a week or ten days his attention was not recalled to it, but about that time he observed that the scrotum on the injured side was larger than the other, particularly at its lower part. This enlargement continued gradually to increase until it had acquired the size and appearance described above.

Few diseases are considered to be better understood than hydrocele, and neither the treatment nor prognosis in this complaint is regarded by the surgeon with any degree of uncertainty. Nevertheless, the diagnosis is not so simple a matter as it is generally thought to be, as there are many conditions which may be connected with a hydrocele so as to obscure all its physical characters and destroy those indications which serve to distinguish it from the other diseases to which this part of the body is liable, although none of these diseases resemble hydrocele, excepting with respect to their external appearance.

The term hydrocele means, strictly speaking, watery tumour, but the term is generally employed to designate an inordinate secretion of serum in the tunica vaginalis testis; it is a disease which occurs at every period of life, from childhood to old age, although it may perhaps be considered as most common at the period of adolescence. To form a just diagnosis of this disease, the first thing is to consider attentively the anatomical relations of the region in which it is situated—the scrotum. This region of the body is obnoxious to various forms of disease besides hydrocele; for it must be remembered, that it communicates with the interior of the abdomen, and, therefore, diseases occurring in it are liable to be complicated with protrusions of viscera, or other abnormal conditions arising in that cavity. The scrotum is composed of many tissues, skin, cellular membrane, fibro-elastic tissue, muscle, and serous membrane; and, in addition to these, the glandular bodies, termed the testicles, and their appendages, which it is indeed the chief office of this part to contain.

A warm and moist climate, or a general anasarcous tendency, predisposes to hydrocele, but its direct causes may generally be traced to some lesion in the scrotum, the testicle, the spermatic cord, or the neighbouring tissues. Among the immediate causes may be enumerated, blows upon the scrotum, such as may be received in riding on horseback; long-continued pressure upon the cord itself, such as may be produced by a tumour in the pelvis, or by an inguinal hernia; or sudden pressure produced by violent muscular exertion. The causes which most frequently operate through the means of the testicle are contusions, inflammation, syphilis, etc.; at the same time it must be observed, that in numberless cases no apparent cause for the development of the disease can be discovered. The usual signs of hydrocele are, swelling of the scrotum, often confined, as in the case I just now read, to one side. The swelling generally takes a pyramidal form, the base of the pyramid being downwards, the apex reaching as high up as the external abdominal ring; the skin covering the tumour is of its natural colour, but, in consequence of its being stretched, all the characteristic corrugations are effaced. The patient generally states, that he discovered the swelling accidentally, and cannot account for its presence; that it commenced at the lower part of the scrotum and gradually filled up towards the abdomen. Upon manipulating such a tumour, it will be found equable over the whole of its surface, not presenting nodules, nor differing in hardness in different points; at the same time, the whole mass gives a general fluctuating sensation. If the patient be taken into a dark room, and a candle placed at one side of the scrotum, so that the tumour is between the eye and the light, the swelling will appear transparent,—frequently so much so as to enable the surgeon to perceive distinctly the exact position of the testicle,—a very desirable object as regards the safety of the operation for the evacuation of the fluid; as you may have observed, all these symptoms were present in the case we are now considering. The size of a hydrocele may vary from that of an egg to that of a child's head, or it may be even larger; and, if the hydrocele be not complicated with any other disease, its size must be entirely dependent upon the quantity of fluid which it contains. The corresponding weight of the swelling to the supposed quantity of serum, therefore, forms a very prominent feature in the diagnosis, even in the absence of fluctuation; for when the swelling is large, and rounded by distension, the incompressibility of the fluid may prevent fluctuation, but in that case the transparency of the tumour, together with the proportional weight, will be conclusive as to its nature. If the apex of the swelling be carefully examined, it will generally be found to terminate at the external ring, not in any degree passing into it. On placing the finger on the ring no protrusion occurs when the patient coughs, which proves the disease in the scrotum to be completely isolated from the parietes or cavity of the abdomen. When all the above indications are present together, there can exist no doubt as to the nature of the disorder, or the treatment to be employed. This was the case in the example of the disease I read to you; and, under such circumstances, the surgeon can have no hesitation in determining upon his plan of action, and his promptitude inspires the patient with confidence in the resources of his medical adviser, and firmness to submit to whatever treatment it may be considered advisable to adopt.

TREATMENT OF HYDROCELE.

Many instances are recorded of patients having experienced a spontaneous cure of hydrocele, even without any apparent cause for the absorption of the fluid,—in young children this is not by any means uncommon. I lately had a case in the hospital of a boy eight years old, with a hydrocele on the right side. I performed the operation of acupuncturation, and the fluid entirely disappeared; about a fortnight after, it had, however, re-accumulated. An evaporating lotion, containing muriate of ammonia, was applied to the scrotum, but, as it produced not the least good effect, it was discontinued. The boy remained, however, in the hospital for other disease, and, when about fifteen days had elapsed after leaving off the use of any remedy for his hydrocele, the fluid began to be absorbed, and soon disappeared entirely. In children I never recommend tapping, but try first the effect of general treatment, applying merely a lotion to the part; the bowels should be opened freely, and the following lotion applied constantly to the scrotum:—

℞ Ammon. muriat. ʒj., sp. vini rectif., liq. ammon. acet., aa. ʒij., aquæ ʒiv. M. Ft. lotio.

Should such treatment not prove successful, I try acu-

puncturation, making two or three small punctures into the tunica vaginalis; and squeezing the fluid into the cellular tissue, so as to produce a kind of œdematous condition of the scrotum. I have seldom known this plan of treatment fail in children, but in adults it is only palliative. About three months since Mr. E. brought me his two sons; the elder about eight, the younger four years of age, both the subjects of hydrocele; the elder having also a hernia, for which he had worn a truss. In neither of the children could the fluid be pressed back into the abdomen. I perperformed acupuncturation in both cases; the younger boy was quite cured, but the hydrocele returned in the elder. I therefore punctured the tunic with the small trocar and canula used in tapping the chest in empyema, and drew off about seven drachms of fluid. Since this period there has been no return of the disease, but the hernia has had a tendency to return; the boy has, therefore, been obliged to resume the use of his truss. It is remarkable, in this case, that two young brothers should have been thus simultaneously afflicted; but I have seen so many instances of this, that I have no doubt that there must be something like an hereditary tendency to hydrocele.

In simple hydrocele in the adult—in such a case for instance as that which I read at the commencement of this lecture—I should always first draw off the fluid, and not employ an injection; for I have found, in many cases, that mere tapping will produce a permanent cure. Should the disease return, I then use an injection of the compound tincture of iodine, one part of the tincture being mixed with three of water. I throw two drachms of this injection into the tunic, allowing it to remain. I have found it almost invariably successful, not having failed more than once in upwards of forty cases; and, in that case, I believe the fluid escaped through the canula. I therefore never employ any other means of treatment, and consider that it ought completely to supersede every other kind of injection, as well as the use of setons, caustic, and indeed all the older plans. It is possible, however, that even this injection may fail. In that case, I should resort to a treatment that I formerly found to succeed after injections of port wine, &c., had failed. This treatment consisted in introducing a seton; but, in most cases, a high degree of inflammation was excited, and in some this gave rise to very alarming symptoms. In all, it was far beyond what would appear necessary to the cure of the disease, although I took the precaution to remove the seton as soon as the inflammation commenced. In applying the seton, I first drew off the water, and then passed a long needle with a curved point, and armed with a single thread of silk, up the canula, bringing it out through the skin of the tumour at about its centre, leaving the thread of silk *in situ*, loosely tying together the two ends. In these cases I have always visited my patients within six or eight hours after the operation. If the inflammation had commenced, I then withdraw the seton. But, even with this precaution, in some cases I have had suppuration of the sac; in one or two sloughing of the scrotum; and in all of them a degree of inflammation which required the strictest antiphlogistic treatment to subdue it. Mr. Key had a case in Guy's Hospital, in 1837, in which he passed a seton through a hydrocele without first drawing off the fluid. The patient died four days after from excessive inflammation. I have in some other cases adopted another plan of treatment. A patient was under my care who had had the fluid drawn off from a hydrocele seven times, and had been injected twice unsuccessfully with port wine. Eighteen months after the last operation, he applied to me. He had then a large swelling on the right side of the scrotum, the transparency of which was very indistinct. I drew off 30 oz. of fluid, and then introduced through the canula a portion of elastic gum catheter. I then withdrew the canula, leaving the catheter within the tunic. This was worn for four days, when he began to complain of pain and redness. I then withdrew the catheter, and applied evaporating lotions to the scrotum. The patient perfectly recovered. In the case of a man in this Hospital, 56 years of age, the fluid was drawn off, and equal parts of port-wine and water injected. In three weeks the hydrocele had again filled. I drew off the fluid a second time, and introduced through the canula a piece of gum catheter, as in the last case. By some accident, the catheter escaped from the tunica vaginalis on the second day; nevertheless, the patient was permanently cured. This mode of treatment, like the seton, is apt to give rise to excessive inflammation. I have known this to be the case in three or four instances, and have, therefore, since I have found the iodine injection so efficacious, entirely given up every other mode of treating simple hydrocele.

[To be continued.]

LECTURE IN CLINICAL SURGERY,

DELIVERED AT

St. Thomas's Hospital,

By JOHN SIMON, Esq., F.R.S.

OPERATIONS FOR RETENTION OF URINE OCCASIONED BY INVETERATE STRICTURE.

[Concluded from p. 362.]

I now proceed to bring to your recollection (for most of you have witnessed the cases) the history of several instances presented in our hospital practice, where I have been induced to perform the modified perinæal operation which I have described and recommended to you, and where the results have been remarkably good.

Case 1.—J. W., a lighterman, aged 55, of damaged general health, was admitted into Abraham's Ward, January 22nd, 1850. He had suffered from stricture for sixteen years; and during the last three years had had a fistulous opening in the scrotum. Urine was discharged in the smallest stream, and only with extreme effort. His urethra was a string of strictures from end to end. Attempts were made twice a week to effect their gradual dilatation by bougies; but much suffering was caused, and little progress made. He had frequent rigors; his nights were restless; and he had little or no appetite. February 14.—The painfulness and sensibility of his urethra made it impossible to persevere in the use of instruments; and, though he was still passing urine, his quick, powerless pulse, anxious countenance, and dry, brownish tongue, showed that he was under great constitutional distress.

The following day, at noon, when I saw him, he was worse; the pulse at his wrist was but just perceptible; his voice was barely audible; he was verging on the typhoid condition, and apparently had but few hours to live. Any severe operation was obviously inadmissible; I would not even let him be carried to the operating theatre, but had him placed on the table of the ward, secured in the lithotomy position. With a single puncture I guided my bistoury into the membranous portion of his urethra, immediately in front of the prostate; and then, as the urine flowed, carried a large elastic catheter along the wound into his bladder. He was immediately replaced in bed, and stimulants were given him liberally and frequently. His relief was immediate; and, though for many days he continued in a most precarious condition (his life being additionally endangered by an attack of bronchitis) yet we succeeded in keeping him up, and, eventually, in restoring him to health. After a fortnight, the elastic catheter was withdrawn, and gradual dilatation of his strictures begun. He remained for a long while in the hospital, rather for his general health than on account of the local disease; and when he left, could retain his water as long as desirable, and discharge it in a full stream.

Several months afterwards he came under my care again, on account of severe ophthalmia; I was then enabled to learn that he was quite free from inconvenience in his urinary organs.

Case 2.—M. N., a fell-monger, aged 20, of impaired general health, and debauched, drunken habits, had been in the hospital nearly a month, when perinæal abscess and commencing extravasation of urine made an operation necessary. He had been admitted June 11th, 1850, having chancre and bubo, both in a sloughy state, and a stricture of the urethra at its membranous portion, which allowed urine to be passed only with great difficulty. Under proper treatment, his health had improved considerably; the sores had advanced in healing, and the stricture was being gradually dilated, when (July 4—8) severe inflammation was

set up in the perinæum, accompanied by rigors and fever. On the 8th, it was evident that suppuration had taken place, and the scrotum was beginning to swell. There was more constitutional distress. Having fixed the patient in a proper position, I made a free opening of the perinæal abscess, and deepened the incision behind, so as to open the urethra just in front of the prostate gland. Through this wound an elastic catheter was conducted to the bladder, and was let lie there for a week, during which no urine passed through the natural channel. At this time, all inflammation having subsided, the process of dilating his stricture was resumed. Three weeks afterwards (August 5) he left the hospital, at his own desire, in good health, able to make water in a full stream, but with the closure of his wound not quite completed.

Case 3.—J. F., aged 39, having retention of urine with tumefaction of the perinæum and scrotum, was sent to me from Norwood, Jan. 17, 1851, and was immediately admitted into Abraham's Ward. He had suffered from difficult urination during little more than a year; but the evil had progressively increased, so that for the last six weeks his difficulty had been extreme, accompanied by violent straining and occasionally by the passage of blood. The bladder had been very irritable. During the last ten days he had had repeated rigors, and within the same period painful hardness and swelling had taken place at the seat of stricture. Complete retention had arisen on the yesterday, and fruitless endeavours had been made to introduce a catheter. On his admission I found that he had a good deal of chronic infiltration about the scrotum; that there was a hard lump, exquisitely tender, reaching from the perinæum to the root of the penis; that he had a very close contraction of the urethra, commencing at its bulb; that his bladder was distended; and that he could only dribble out a few drops of urine. He was in great suffering, and it was requisite to relieve him immediately. The membranous portion of his urethra being opened with a straight bistoury, and a large elastic catheter introduced through the wound, about two quarts of urine were drawn off. A quantity of fetid pus escaped at this opening, as also at a second incision, which I thought it prudent to make in the scrotum. The cellular membrane appeared sloughy. His immediate relief was complete, and he recovered with no bad symptom. On the 18th, I ordered him a pint of porter; on the 19th a dose of castor-oil; on the 20th four ounces of gin daily, in addition to his beer. On the 27th—General health improving daily; tongue clean, appetite recovered, bowels regular; scrotum reduced to its natural size; the incision in it healed; little induration remaining in perinæum. Stricture examined—admits a middle-sized catheter, which, however, it was thought well not to press on to the bladder. 28th—No inconvenience from yesterday's examination of the stricture. On the 31st—elastic catheter discontinued. Feb. 3rd—middle-sized silver catheter carried without pain through the stricture into the bladder. 12th—catheter is being passed every other day; he makes water in a good stream; wound in perinæum disinclined to heal. March 12th—stricture quite well, urination quite natural, health quite sound, but wound fistulous—touched with actual cautery. April 12th—a few drops of urine still occasionally escape at the perinæum; hot wire again. April 21st—cured.

Case 4.—J. D., aged 57, seaman, admitted July 7th, 1851, into Abraham's Ward; has had difficulty in discharging urine for twenty years; has never had entire retention, though often he has only been able to pass it in drops; during the last seven months his sufferings have much increased, and the scrotum and perinæum have been habitually tender and painful. A week before admission, he experienced a sense of something bursting at his fundament, and immediately afterwards discharged a large quantity of pus *per anum*. On admission, scrotum large, red, tense, exquisitely tender; perinæum hard, painful, very tender; areolar tissue over pubes and lower part of abdomen getting infiltrated; little or no urine traverses the urethra, most of it escaping through the rectum with a large quantity of stinking, purulent matter. On careful examination, it appeared that this passage occurred in an indirect manner; namely, through a large abscess, which, lying between the bladder and rectum, and communicating with both, enabled the former viscus partially to discharge itself through the latter. The man's constitutional condition was all but typhoid. After some reflection, I determined that the urethral operation was his best chance of relief. Having fixed him suitably, I made a free incision in the raphe of the perinæum, venting a pint of fetid pus; sank my bistoury to the urethra, which I punctured at the usual spot, introduced there an elastic catheter, through which a wash-hand basinful of urine discharged itself at once—showing how insufficient had been the previous relief *per anum*; made two incisions at the scrotum and one at the pubes, into sloughy cellular tissue, full of stinking matter; and, having speedily sent the patient back to bed, gave him a glass of hot brandy and water, and warm dressing over all the inflamed integuments. 8th, a.m.—Has slept three or four hours during the night; has drunk eight ounces of brandy with water and some strong beef tea in the last eighteen hours; expresses himself as immensely relieved; discharge of urine through catheter abundant; general condition much improved. 10th.—Having shivered yesterday, and had pain in the scrotum during the night, another incision is made, which allows the escape of some confined fetid pus. 11th.—Much better; some sloughs of cellular tissue have been drawn from the several wounds; copious suppuration; no urine passes by the bowel. 17th.—Has continued to improve daily; appetite for solid food regained; elastic catheter withdrawn from perinæum; small silver catheter passed through stricture. 24th.—Has had painful diarrhœa for some days, requiring the use of krameria with opium; strictures dilating comfortably under use of catheter every three days. 31st.—Diarrhœa gone; general health much improved; takes food well; catheter left in the urethra for some hours on the days when it is employed. August 16th.—No. 8 catheter can readily be passed into the bladder. 23rd.—No. 12 passed into bladder; wounds in scrotum and pubes quite healed; general health quite re-established. Sept. 8th.—The opening in the perinæum having not yet completely closed, and still giving passage to urine, I ordered him to refrain from making water himself, and to have a catheter passed for him thrice a day, so that the fistula might be undisturbed by urine. This plan appeared to succeed, for, on Sept. 18th, he left the hospital perfectly cured.

Case 5.—J. L., aged 34, a hawker, admitted into Lazarus Ward Oct. 14th, 1851, suffering with perinæal abscess. He has had stricture for at least six years, and has frequently had recourse to surgical aid for the relief of retention of urine. The symptoms of suppuration in the perinæum have been going on for about a week. Immediately on his admission I made a free incision into the abscess, discharging all its contents. Finding that, with very careful manipulation, I could get into the bladder a No. 1 catheter (through which a great deal of urine with muco-purulent matter was drawn off) I flattered myself that any further operation might be dispensed with. Next day, however, I found that he was suffering a great deal of local and general discomfort, and that considerable induration, with pain and tenderness, was extending itself from behind the scrotum to the root of the penis. This convinced me that the measures I had adopted were insufficient to prevent extravasation of urine; I accordingly opened the urethra (as in the foregoing cases) in front of the prostate, and set a large elastic catheter in the wound. This proceeding was followed by marked relief, and the tumour of the scrotum quickly declined. The perinæal catheter was discontinued on the 27th, and dilatation of the stricture begun with a No. 5. The man was of drunken and irregular habits, and required gin during his after-treatment, which otherwise presented nothing remarkable. He became impatient of hospital rules, and left us convalescent, on the 17th November.

Case 6.—J. G., aged 35, sturdy and well-conditioned, but habitually intemperate, was admitted into Abraham's Ward Oct. 17th, 1851, having perinæal abscess, with extensive extravasation of urine. He probably has had stricture for nearly nine years; his first complete retention of urine arose, after a debauch, three years ago, since when it has frequently recurred. The urethra appears to have given way four days ago. With great effort and pain he can dribble out a very little urine through the yard. Pulse 116, small and weak; tongue white and coated; general febrile disturbance; scrotum and perinæum prominent and tense; integument of belly œdematous almost to the navel. I proceeded to treat him in the same manner as the preceding cases,—punctured his urethra from the perinæum, and introduced a catheter through the wound; made a free incision at the scrotum and pubes, discharging an immense collection of pus and urine; and left his stricture unmeddled with for

the next ten days. During this time his inflamed parts were poulticed with warm-water dressing, and his strength was sustained by appropriate diet. On the 27th, I withdrew the perinæal catheter, and made my first examination of his urethra. I found that, through a long succession of strictures, beginning just within the orifice, I could conduct a No. 5 into his bladder. From this time gradual dilatation was practised; and he left the hospital cured, Dec. 2nd.

The preceding six cases constitute my total of hospital-operations for retention of urine during the last two years. Most of you may have seen them all. The cases have differed from one another considerably in detail: but in all of them the simple proceeding which I recommend has been effectual. As I review them, I feel assured that for none of them could any other operation have been more successful than that which was performed; and I believe that, for most of them, no other could have been equally successful.

In the first case, the patient was moribund. I do not know that I have ever seen a man with chronic urinary disease recover from such apparent proximity to death. If I had set about dividing his strictures in the perinæum, and forcing a large catheter along the contracted channel of his penis, the loss of blood and the protracted pain would have been too much for him. He would probably have died on the table. It is true that his urgent symptoms would have been relieved if I had tapped the bladder above the pubes, or by the rectum; and his case, in my judgment, is that one of the series in which it most nearly became a matter of indifference which of these operations should be performed. I have already told you the general principles on which I consider the perinæal puncture preferable to either of the other operations; and in this case, as generally, I saw no reason to choose the greater risk of the supra-pubic puncture, or to effect, by stabbing through the bowel, what could equally be done by traversing the skin. Most effectual relief was given him at a minimum expense of injury; and this, it need not be urged, is the desideratum in every surgical operation.

In all the other cases, urine was actually tending towards the perinæum. An opening of the urethra (though an insufficient one) had been established by an ulcerative process behind the seat of stricture. A perinæal incision was indispensable for the evacuation of pus and extravasated urine. Under these circumstances, to make a second wound through the rectum would have been the infliction of unnecessary mischief.

Indeed, in such cases, one hesitates whether it might not be expedient to advance a step further in the process of simplification; and, since nature has bored a hole in the urethra, whether we might not remain satisfied with a free division of the superficial parts, trusting to the sufficiency of the ulcerated hole (unassisted by a catheter) for maintaining the bladder without distension, and the stricture without irritation.

My one experiment in this direction was not satisfactory. In this instance (*Case* 5) as the urethra was pervious to a small catheter, and as no considerable diffusion of urine was in progress, I contented myself with a free perinæal incision, reaching to the urethra; and I trusted to the urine finding its way readily by this channel. But on the morrow it was clear that this measure had been insufficient; urine was apparently making its way, according to the general course of its extravasation, towards the pubes; and I therefore, with marked advantage to the patient, passed my bistoury a second time into the wound, opened the urethra there, introduced an elastic catheter, and thus diverted the entire stream of urine away from the parts where it was hurtful. Rationally, too, one would expect this to be, for all such cases, the safer and better course. One cannot be sure of the exact spot where the pipe has given way; the ulcerated opening may be on one side or the other; it may even be in the upper wall of the urethra; so that its communication with the perinæal vent would be oblique or circuitous; it may be so restricted or valvulated by fascia, as to give the urine facilities for creeping preferably in other directions. It is, I think, an indication of supreme importance, to make the artificial channel of escape as direct and as free as possible.

The fourth case was peculiar in respect of the aperture already made into the rectum, through which urine was flowing; and when the circumstances were under consideration, a very obvious thought arose—whether that communication, already existing between the bladder and rectum, could be turned to account for the patient's cure. I determined in the negative. In its actual state it was evidently insufficient; for extravasation of urine was advancing to a frightful extent. It would have required surgical assistance (by trocar or otherwise) to make it available; and any such proceeding would have been made difficult and hazardous by the abscess between the two viscera, and by whatever change in their mutual relations that abscess had occasioned. If the rectal opening of the abscess were to remain plugged by a canula, who knew but we might have trouble from distension of the suppurating cavity, leading perhaps to some distant and less convenient discharge of its contents, or attended by increase of irritation in those inflamed tissues which the canula must traverse? Looking to the patient's almost typhoid condition, I dared not turn a hair's-breadth from the course which would give him, I knew, instantaneous and complete relief; so, while evacuating by an incision the fetid accumulation of pus and urine with which his perinæum was distended, I likewise punctured his urethra in the manner I have described to you, and conducted a catheter through the wound. Nothing could be more pleasing than his after progress; he was immediately at ease. One could see how immense a weight had ceased to press down the springs of his life; and in a very few hours he was removed from imminent peril of death to a state of comparative security.

Thus much for the cases; and, as regards the mechanical details of the operation, I need scarcely add to what I have already said, beyond recommending you to practise on the dead body, at every convenient opportunity, the art of reaching the urethra at its membranous portion without the guidance of a staff. On your power of doing this depends your right to attempt the operation I have described to you. But what can be easier? The canal which you wish to penetrate is not a small one; often, indeed, it is considerably dilated in consequence of the diseased condition which obliges you to operate; its position is invariable, and in every point of its course can be readily explored from the surface. The bulb is subcutaneous. The prostate you feel within the anus. The length of canal between these two points is not an inch; its course straight in the median plane. Any difficulty which might be occasioned by the bulging of the perinæum with pus or extravasated urine ceases, of course, with your first incision, which (in such cases made with proper freedom) gives immediate vent to the confined fluid, and enables you to proceed with facility. Often in thin subjects, and where the urethra has not given way, the distension of this canal, as the patient strains to make water, will render it so evident, that your operation may resolve itself into a mere puncture with a lancet. In the less easy cases, where your subject is fat, or the perinæum deep and infiltrated, there is really nothing to deserve the name of difficulty. You make a sufficient cut in the raphe, terminating a little in front of the anus, and sinking as deep as may be requisite into the cellular tissue. You may then, in the following way, arrive at the point of the urethra which you wish to penetrate. Pass your right fore-finger into the anus; ascertain, through the wall of the bowel, the position of the prostate; bring your finger forward till it discovers the anterior extremity or apex of the gland; let it just pass this spot, and rest (nail upwards) pressing with its point immediately in front of the gland. Of course, if the parts were transparent, you would now see your finger indenting the membranous portion of the urethra at that hindermost point of its course where you purpose to puncture it. Now pass your left fore-finger (nail upwards) into the wound; advance it till (with the guidance of the finger in the rectum) it falls against the apex of the prostate; there you so arrange it, that the middle phalanx presses back the rectum; the last phalanx lies along the prostate, with the tip of its nail indicating the spot at which the urethra emerges. Finally, withdrawing your right fore-finger from the anus, and resuming the bistoury, you run this along the left fore-finger, till you penetrate the canal on which it rests, and immediately follow it by the short elastic catheter which you intend leaving in the bladder.

The cut is made into the urethra, you observe, just at the confines of its prostatic and membranous portions; a spot which is posterior to the seat of stricture, and is easy to hit, from the definiteness and invariability of its position.

With a little practice on the dead subject, you will readily acquire the knack of doing this operation in the natural condition of the parts with a single puncture; and you will find that disease alters those natural relations far less than is com-

monly stated. But in the most difficult cases which can come before you, if you follow the rule I have given you, and carefully determine through the rectum the exact point at which the urethra emerges, you will fail to find any embarrassment, and will complete the operation in much less time than I have taken to describe it.

The after-treatment of these cases, for some days succeeding the operation, is not unimportant. Liberal allowance of stimulants is often required, sometimes from the very first. This purpose I generally effect by wine, or (if the stomach be irritable) by brandy with soda water. Actual drugs I rarely use, unless it be to procure action from the bowels, which, if their secretions be much disordered, I do as early as possible, with either colocynth or compound rhubarb-pill, in combination with blue pill. Opium I do not find admissible.

As regards the history of the operation which I have recommended to you, I cannot give you very full details. If you refer to Sir Astley Cooper's Lectures on Surgery, (a) you will find that, at the time of their delivery, he recommended, in cases of simple stricture, that a puncture should be made into the urethra where distended by urine, immediately behind the seat of stricture; and Sir Benjamin Brodie (who rather leans to the rectal operation) speaks (b) of the puncture of the urethra as "a sufficiently simple and unobjectionable proceeding." As far as I can judge from Sir Astley Cooper's scanty description, it was only in cases of stricture far forward in the urethra that he adopted this course, and "passed a lancet" into some part of the canal anterior to the bulb. At least, if he ever practised any such operation as I advise for strictures situated further back in the urethra, so that his puncture would have been made in the vicinity of the prostate, I suspect that he soon afterwards abandoned it for the supposed advantages of dividing the stricture. The latter operation seems to have taken its rise about forty years ago. It was first practised, I believe, by the late Mr. Grainger, of Birmingham (father of my distinguished colleague, our teacher of Physiology), and is very well described in a volume of "Medical and Surgical Remarks," published by that gentleman in 1815. It soon became the general operation for cases of stricture, and has been extensively practised, in the Borough hospitals and elsewhere, down to the present time. When Mr. Grainger found himself unable to accomplish it, he used to make a partial division of the prostate, as in the lateral operation of lithotomy, and thus convey an elastic catheter to the bladder.

Sir Benjamin Brodie recommends, in cases where the urethra has given way behind a stricture, and where a bougie can be introduced, that this should be used as a director for the introduction of a perinæal catheter, and that the latter should be left in the wound for one or two days.

I am not aware of any surgeon having habitually practised the operation in the form I have described; and, from such observations as I have made on the subject, it seems to me well worthy of more general adoption. Practised in the manner I advise, it may, I think, entirely supersede the operations for tapping the bladder, except in those very rare cases of prostatic tumour, where the supra-pubic puncture is inevitable. It likewise entirely annuls the supposed necessity, while it avoids the difficulties and dangers, of dividing the stricture *in perineo* for the relief of retention of urine. And its advantages, meanwhile, are purchased by so trifling an endurance of pain, inconvenience, or injury, that I could not cite to you, from the whole practice of surgery, any parallel instance of disproportion between means and results—any instance where, from an extremity of disease, suffering, and danger, the patient is suddenly removed, by surgical appliances so simple and so secure, to a condition of comparative enjoyment and safety.

The only argument likely to be urged against the proceeding in question is one which I may best anticipate and answer in Sir Astley Cooper's words. "This operation has been objected to (he says) on the supposition that it requires great anatomical knowledge. To this objection I will say, that he who is adverse to an operation because it requires anatomical knowledge, should immediately give up his profession; for if surgery be not founded upon an accurate knowledge of anatomy, it will be better for mankind that there should be no surgery, as disease will proceed better with the natural means of relief than with the aid of those surgeons who are not anatomists."

(a) Vol. II., p. 315—317.
(b) Diseases of Urinary Organs, p. 42.

ORIGINAL COMMUNICATIONS.

CASE OF ACUTE ARACHNITIS INDUCED UPON CHRONIC DISEASE OF THE BRAIN,

BY RIDING IN A VERTICAL SWING AT A FAIR.

By JOHN D. BROWN, M.D.

Previous History.—Edward W., aged 13 years, was affected by weakness of the right side of the body at the age of seven months, during dentition. He became wasted so as to resemble, as his mother expressed it, "a skinned rabbit," and did not recover his health, or become able to walk, till after two years of age. From that period he enjoyed a tolerable share of health; but he remained small in stature, and the weakness of the right side gradually increased. In November, 1850, he received a blow on the forehead by running against a wall while at play. He became silly immediately, and remained so till he fell asleep on going to bed that night. Next day he appeared to be well, and he went to school as usual. Since that time, the weakness of the right side increased still more rapidly, and a vacancy in his manner was several times observed. He would sometimes fetch wrong articles on being directed to bring anything from one part of the house to another; and he appeared, at times, to be deranged in mind.

Seizure.—He was in his ordinary state of ill-health, as above described, on the 28th August, 1851, when he went to Strood Fair, where he rode in a vertical swing. His face was noticed to be "black" on his coming out of the swing, but he made no complaint, and went home to his tea about 6 p.m. He shortly after returned to the fair, and, at seven o'clock, was noticed by a boy to be making faces at him from behind a post, in an extraordinary manner. He was soon after seized with convulsions affecting the face, upper extremities and body (as low as the pubes.) The lower limbs were not affected by the convulsive movements. He continued to be violently convulsed till his death, which occurred at 1 p.m. next day, 29th August, twenty-one hours from the seizure. He was perfectly unconscious the whole time. The pulse was weak, and the pupils were contracted.

Antiphlogistic treatment, including leeching, was employed, and the bowels were opened by cathartic medicines.

Examination of the Body Nineteen Hours after Death.—Weather cool; rigor mortis; no emaciation; sides of the head and body equally developed.

Head only Examined.—Veins of dura-mater full of blood. No thickening of this membrane. Whitened condition and pulpy thickening of the membranes covering the greater part of the convolutions. The membranes, in some parts, were infiltrated with sanguinolent serum, but there was no serum in the sulci, between the convolutions. Delicate filiform adhesions, apparently of long duration, were found between the middle lobe and the small wing of the sphenoid bone, on each side; also between the middle lobe and the petrous bone, on the right side. Four ounces of bloody serum, of the colour of coffee, were found at the base of the brain. The basilar artery was sound, as also the other vessels. The medulla oblongata and pons varolii were healthy. The surface of the cerebral convolutions was rather darkened in tint, and very slightly diminished in consistency. The white cerebral matter was free from bloody points. The ventricles contained a small quantity of clear fluid. The choroid plexuses were very pale. The centre of the brain was healthy, except the thalamus opticus of the left side, which presented transverse ridges on its surface. There was slight softening of the hollowed portions, while the ridges felt indurated. The corpora striata were particularly healthy. The cerebellum was diminished in consistency.

Inferences.—1° Ramollissement of the thalamus opticus of the left side during dentition, with imperfect recovery.

2° Increase of weakness of right side, due to further ramollissement.

3° Meningitis, produced by the blow on the forehead in November, 1850, causing adhesions of the middle lobe.

4° Acute arachnitis, produced by the derangement of cerebral circulation in the peculiar movements of a vertical swing.

Remarks.—The absence of convulsive movements of the lower extremities is worthy of particular notice.

A useful practical rule may be deduced from the preceding case, namely, to forbid any exercise that can derange the cerebral circulation in chronic diseases of the brain.

Strood, Kent.

OBSERVATIONS ON THE LOCAL TREATMENT OF ULCERS OF THE LEG.

By HENRY T. CHAPMAN, Esq., F.R.C.S.
Late Senior Surgeon to the St. George's and St. James's Dispensary.

[Concluded from page 318.]

TREATMENT OF ULCERS ON THE LEG.

2. *Treatment of Irritable Ulcers.*—Reference has already been made to certain local conditions of ulcers on the leg, which are the ordinary sources of their morbid sensibility; but there is no characteristic of the complaint occasionally so obscure in its origin, so capricious in its nature, or so difficult to manage. It is, in fact, to meet the infinite shades and gradations of this peculiarity that the great multiplicity of topical applications has chiefly been devised; but the practice of those who trust to them alone for success must be more or less empirical. "The greatest experience," says Mr. Abernethy, "does not enable a surgeon to select with certainty a successful application; for every candid surgeon must allow that, after having tried a round of applications without benefit, one has at last been employed from which no great good was anticipated, but which has, nevertheless, completely allayed the morbid feelings of the sore."(a)

Instead of thus experimenting on a sensitive sore, trying remedy after remedy until we may chance to hit upon the one which will tranquillise the morbid state of its nerves, and prepare the way for healthier action, a careful investigation of the previous history and present condition of the ulcer will rarely fail to elicit some indications, both of the nature and source of its irritability, and of the means best adapted to remove it. Thus, when we find it to be merely symptomatic of over-distension of the blood-vessels, coming on when the patient stands erect, and the limb is exercised, and passing away when it is laid up at night, we know that it will be at once remedied, not alone by rest in the horizontal posture, but by the support of a bandage judiciously applied. If it has become chronic, the pain continuing almost incessantly night and day, (in this stage, indeed, it is often much more severely felt at night than during the day,) and increased by the pressure of the bandage, we may fairly conclude that the nerves themselves have undergone some morbid change, requiring further and special treatment. This higher degree of morbid sensibility will yield, in a very large proportion of cases, to the combination of soothing measures and support described under the same division of the subject in my Essay on ulcers, in the prosecution of which a great variety of sedative local applications in the aqueous form is admissible, the sore being at the same time gradually accustomed to moderate compression. Cases XVI., XVII., and XX., pp. 137 to 145, may be cited as striking illustrations of its efficacy.

But when this plan has been tried in vain, and absolute intolerance of the bandage is manifested, I generally infer that inflammation of some of the surrounding tissues exists, and have recourse to leeches; applying two, three, or more to the surface of the ulcer, and repeating them from time to time, if necessary, until the excessive irritability is reduced. Whether inflammation were actually present or not, I have never seen any disadvantage attend this practice. On the contrary, the extreme sensibility ere long subsides under their use, until it reaches the point at which the bandage may be resumed; and this step once gained, granulations will in general soon spring up, and the case thenceforth proceed as favourably as a simply indolent sore. The only circumstances in which I apprehend that local abstraction of blood is likely to be injurious, are when the ulcer is weak as well as irritable,—a concurrence usually resulting from constitutional debility,—and in herpetic ulceration originating in the same cause. Should, however, the morbid sensibility still prove stubborn, counter-irritation, at some little distance from the ulcer, by means of the small open blister already described, will often succeed in getting rid of it when everything else has failed, of which the following case is an example:—

Mr. L., aged about 40, consulted me April 24th, 1851, on account of two small, but extremely irritable ulcers, situated one behind the outer ankle of the left leg, the other behind the inner ankle of the right, with which he had been tormented for upwards of three years. During the last six months they had frequently been so painful, that for weeks he was unable to attend to his business by day, and his nights were sleepless. Under escharotics and plaster strapping, the sores had healed more than once, but had broken out afresh within a fortnight, these short periods of cicatrization not having been attended with the slightest remission of his sufferings. With the exception of feeble digestive power, headaches, and a worn countenance, which might be no more than the natural consequences of the pain he endured, and the restless nights he passed, I could not discover anything very materially amiss with his general health; but, suspecting some latent mischief as the cause of such inveterate irritability, I began the treatment with various constitutional measures, in conjunction with support and emollients locally. Little or no improvement ensuing at the end of three weeks, a leech was applied to each sore, which drew a considerable quantity of blood, and afforded some relief; and, on the 17th of May, I established a blister about the size of half-a-crown just below the knee of one leg, the sore on which was the more painful of the two, and a second on the arm, continuing to bandage the legs as before. All pain ceased as soon as the blisters discharged freely; and, in little more than a week from this time, both ulcers were cicatrized. At the present date (August 28) the cicatrix behind the left ankle is somewhat indurated, but the cure bids fair to be sound, and the patient feels stronger and better in health than he has done for many months. The blister on the leg was allowed to heal when the sores were perfectly skinned over, that on the arm being kept open permanently.

The practice will be more fully noticed presently; but, from what I have seen of the plan of treating chronic ulcers by applying a large blister over them, so highly eulogised by Mr. Syme, I may here state briefly my persuasion, that, when a callous sore is at the same time irritable, its morbid sensibility will often be seriously aggravated by it. In those cases, notwithstanding, to which I referred in an early part of this paper, where a point of skin projecting from the margin of the ulcer (and not its surface) is the seat of pain, I have sometimes removed it entirely by touching the spot with Acetum Cantharidis, and raising a minute blister; thus imitating successfully the process by which I had observed that Nature herself relieves it.

With respect to the plan recommended by Mr. Critchett in unmanageable cases of sensitive ulcer,—that, namely, of compressing them by plaster-strapping applied as tightly as it can be drawn,—I will not hazard any positive opinion. In the few instances in which I have made trial of it, the pain produced has been so insupportable, that the patient has been compelled to tear off the straps soon after I had put them on. But in a morbidly sensitive sore, complicated by varix, the pain will frequently be relieved at once by a tight bandage; and I can well believe that there are other instances in which a very high degree of sensibility may be thus subdued. Although Sir Everard Home's exposure of the evils resulting from, and reprobation of the indiscriminate application of, compression to ulcers, were chiefly levelled at its employment in sores of this character, several of the older writers, from Wiseman downwards, attribute their success in curing all varieties of the disease to the *tight* bandaging they practised. As John Bell expresses it, they "squeezed them into good humour by compresses and firm bandaging." Nevertheless, with my experience of the control which may be exercised over this class of ulcer by leeches, by counter-irritation, and by equable support, combined with soothing applications (to say nothing of escharotics (a) and alteratives), I must confess that I should feel very reluctant to resort to powerful compression in any but exceptional cases; being rather disposed to look upon it as a last resource to be tried only when all other treatment had proved unavailing.

(a) Abernethy's Lectures, p. 110.

(a) It is well known that emollients and sedatives do not always succeed best in alleviating the anguish of a confirmed irritable sore. "Wiseman, speaking of such an ulcer," observes Dr. Underwood, "has this bold expression, which I doubt not was the result of experience—'The best anodyne had been to have filled it with precipitate.'"

3. *Treatment of Callous Ulcers.* — Whatever objections attach to the employment of tight bandaging under other circumstances, the absorption of the indurated deposit, in which sores of this class are more or less deeply imbedded, will be very materially promoted by it. The purely callous ulcer, and some varieties of the varicose, are, in fact, almost the only cases in which it can be used without great risk that the good it may effect will be more than neutralised by concomitant evils; but the only safe mode of applying the necessary compression is that of strapping the limb from the toes upward, practised by Mr. Scott. To this I add brisk friction, for some time, whenever the strapping is renewed.

There is, however, another method by which the same object may be more speedily attained; this is the proceeding so warmly recommended by Mr. Syme in his "Contributions to the Pathology and Practice of Surgery." It consists in the application of a large blister over the sore and the neighbouring swollen parts of the limb, for the purpose of dispersing the subcutaneous induration and thickening, so as to relax the integuments, and thus remove the obstacles to healing action. He states, that "no subsequent treatment beyond the attention requisite for ensuring quiet and cleanliness is needed, and that recovery is completed, not only more quickly, but with much less tendency to relapse, than when accomplished by other means." "The facility, rapidity, economy, and lasting effect of this treatment," continues Mr. Syme, "seem to give it a decided advantage over the other methods in use; and, so far as I am aware, no one who has tried this plan ever afterwards hesitated to employ it in preference to any other."

Having repeatedly witnessed the beneficial operation of this practice (with certain limitations to which I shall presently advert) in sluggish ulcers of long standing with callous margins, and likewise in deep sores with elevated, perpendicular edges, I can bear testimony to its efficacy in getting rid of the obstacle which had hitherto, in such cases, prevented the reparative powers of the part from originating healthy action. But though the removal of what may be termed the chief bar to improvement in callous ulcers—the deposit of lymph, namely, beneath and around them—is unquestionably a very important step towards their cure, and Mr. Syme might fairly have assumed that blisters are preferable to all other means heretofore resorted to *for this especial purpose*, in treating the subsequent management of the case as an affair of comparatively little moment, he has taken a course extremely likely, I conceive, to bring the practice into discredit. I know that the inference very commonly drawn from the passage quoted, to the disappointment of both surgeon and patient, is, that, the blister having done its duty, the sore will heal spontaneously and permanently; a conclusion against which Mr. Syme would doubtless be the first to protest. But if, on the other hand, confinement to the horizontal position be indicated, and nothing short of it will ensure the requisite quiet, it certainly ought to have been declared in more positive and precise terms.

With all deference to Mr. Syme's authority, however, I cannot coincide with either view of the matter. In the first place, admitting that an old ulcer, treated by his plan, may possibly heal without absolute rest, recovery would rarely, I think, be completed with facility and rapidity. Secondly, while readily conceding that, in very many cases—healthy granulation being once established—where perfect rest is enforced, the sore will progress steadily if not rapidly towards cicatrization, I very much fear that an exclusive reliance upon Mr. Syme's plan for the *completion* of the cure, even where the horizontal position can be strictly maintained, would often be attended by failure. But I have already shown that, with the mass of the labouring classes, the greatest sufferers from this malady, it is next to an impossibility that any plan of treatment, requiring perfect rest as the necessary condition to its completion, can be put in force; consequently, unless some more practicable after-treatment be had recourse to, a very small proportion of those most in need of assistance would derive any permanent benefit from the measure under consideration. Thirdly, it is not in accordance with the experience of nearly all who have devoted their attention to this subject, that cures perfected chiefly by rest show "much less tendency to relapse than when accomplished by other means." The very reverse of this proposition is one of the principles laid down by John Bell, Underwood, Baynton, Whately, Home, and Scott. "The frequency," says Dr. Underwood, "I had almost said the constancy, with which large and old ulcers on the legs are found to return, is greatly owing to their having been healed in the horizontal position of the limb." (a) And Sir E. Home asserts, that cures effected under the use of stimuli and judicious support are sounder than those brought about by rest, in the proportion of four to one. I need not, however, dwell upon this point, having discussed it elsewhere,—at greater length, perhaps, than such of my readers as still adhere to Baynton's method might deem necessary, were it not, as I have stated in apology, "that a disposition has been manifested of late to depreciate the value of this principle, (support by bandaging,) and revive the old opinion of the paramount importance of rest" in the management of these affections. Lastly, I must observe, that the discipline proposed by Mr. Syme, "carried fairly into effect," is unnecessarily severe. I have heard resolute men complain bitterly, for more than twenty-four hours, of the pain caused by the application of a blister, in the manner recommended, to an indolent or callous sore; and have seen more than one instance in which the morbid sensibility of an irritable ulcer has been very considerably aggravated by it.

The following cases will substantiate most of these positions:—

Mr. G. P., aged 33, was attended by me in September, 1818, for an ulcer on the leg. He reported that ten years ago he suffered a severe attack of erysipelas on the same leg, terminating in extensive subcutaneous abscesses, which nearly proved fatal. His health had been very good of late, but the limb affected was weaker than the other, the veins were varicose, the skin darkly stained, and swelling came on if he fatigued himself or caught cold. May 28th, 1818, he grazed his shin, and an ulcer formed, for which he had been under treatment ever since, a great portion of the time confined to his bed. The leg had not been strapped, and only lightly bandaged to confine the dressings. A large blister had once been applied, but had caused such extreme suffering, without being followed by the slightest improvement, (although he had kept his bed for some time after it,) that, on a repetition of the blister being proposed by the surgeon under whose care he then was, he refused to submit to it, and unctuous dressings, with rest, had since been the only means employed.

Sept. 13.—When I first saw it, the ulcer was extremely sensitive, but not inflamed; its surface smooth, with not a trace of granulations, and very little surrounding induration; the discharge profuse and watery. A coating of ointment and scales of cuticle extended for some distance round it, and, when this was carefully washed away, it left the skin very red and tender. It was then treated by the combination of soothing measures and support I generally commence with in irritable ulcers, a douche of cold water being directed every morning over the bandage.

20th.—The surface of the sore was covered with florid, healthy granulations; the skin was clean and sound, and he was able to go out and attend to his business. On the 24th, the ulcer was reduced to half its former size, and quite free from pain; but on the 25th I was sent for to him, and found that violent inflammation and vesication had come on above the ankle, presenting the appearance of a severe scald. On inquiring into the cause of this mischief, I learned that he had been into the country the day before, and, having walked much more than was prudent, the bandage had galled the skin. Warm-water dressing was applied, and the limb laid up.

30th.—The excoriation being nearly healed, the bandage and straps were resumed, and by the 5th of October the leg was perfectly well.

The second case was an example of that conjunction of irritability with callousness to which I formerly alluded as not unfrequent behind the ankle. I was at the time trying the efficacy of Mr. Syme's remedy, (although I had then ceased to apply blisters of the size recommended by him,) and, as the sore was raised considerably above the surrounding skin by the hard nodosity on which it rested, I determined to have recourse to it, notwithstanding the existence of a high degree of morbid sensibility. The plaster was not large enough to extend more than half an inch beyond the margin of the ulcer, but the agony my patient endured compelled him to remove it before it had been long applied.

(a) Treatise on Ulcers, p. 53.

Vesication occurred, nevertheless; but the sensibility was so much increased, and continued so harassing for many days afterwards, that he was entirely confined to the sofa, and would scarcely see me. Meantime the induration gradually disappeared, and with it much of the irritability; so that, when at length I was able to put on the bandage once more, cicatrization took place speedily.

Recognising, therefore, the great utility of Mr. Syme's suggestion, as a means of promoting the absorption of that indurated deposit which is the principal source of intractability in callous ulcers, and frequently proves an additional impediment to healthy action in those merely characterised by atony, a few experiments satisfied me that, by modifying in some degree the agency by which this object is attained, the sore and parts subjacent might be roused from their torpid habit with scarcely any pain; the process, at the same time, being rendered perfectly compatible with that principle of after-treatment which alone is applicable to the great bulk of the cases met with in the lower classes, and which an ample fund of recorded experience has proclaimed to be the best adapted, in patients of all classes, to complete and maintain the cure.

Instead of applying a blister large enough to cover the ulcer and a considerable portion of the surrounding skin, I found it quite sufficient to paint, with a camel's hair brush dipped into acetum cantharadis, from a quarter to three-quarters of an inch of the skin at the margin of the sore, making this streak wider or narrower in proportion as the induration extended to a greater or less distance from it. When the integument itself is in a callous, horny state, several coatings of the liquid may be required; and it should be allowed to dry before the leg is dressed. It rarely happens that much inconvenience is felt during the action of the blistering fluid, the patient being able to bear the pressure of a bandage lightly applied, and to take moderate exercise; sometimes, however, it causes a good deal of pain, and it becomes necessary that the limb should be laid up for twenty-four hours. Within this period vesication is usually accomplished to the requisite extent, and the detachment of the thickened cuticle, together with the flow of serum from the exposed surface, lowers the elevated margin quite as effectually as the larger blister.

But the rise of granulations which ordinarily follows the dispersion of the indurated sub-stratum of an ulcer, is only the first step in its progress towards healing; and unless the sore be still carefully tended, it will speedily relapse into its former indolent or callous state. In all cases, therefore, as soon as this step is gained, no time should be lost in applying either Baynton's bandage, or the simple substitute for it which I employ; since upon no other after-treatment can we so confidently rely for bringing about a sound and lasting cicatrization.

When most successful, a repetition of the blister is often called for, the margin of the sore manifesting a disposition again to become thickened and indurated as it decreases in size.

A case which has been recently under my care so fully corroborates what I have said upon this and some other points of practice, that I am tempted to give it in as few words as possible:—Mrs. B., a tall, stout woman, aged 55, called on me early in May, 1851, with a large, deep ulcer, describing a curve of quite six inches in length, from a spot just above the inner ankle of the right leg, across the lower part of the calf almost to the outer ankle. Considerable induration surrounded the ulcer, and its margin at the convexity on the calf was little less than an inch in depth. She spoke of it as dreadfully painful, destroying her rest, depriving her of appetite, and making life a burden to her. It broke out upwards of fourteen years ago, over a cluster of varicose veins, with which malady she has been troubled for more than twenty years. One of the veins has burst three times, and, on the first occasion, she states, that she nearly bled to death before she could obtain assistance, since which she has constantly worn a bandage. The sore formerly healed several times for a short period, but soon broke out again, and has now resisted all attempts to cure it for nine years.

I commenced the treatment by applying leeches to the surface of the ulcer, which were repeated in a few days, with the effect of almost entirely removing the pain. After this, its circumference was blistered to the width of half an inch. At the same time, support and astringent lotions were employed, and Mr. Startin's elastic riband wound round the leg on the outside of the bandage, the calf being so large that the roller could not otherwise be retained in place. By the end of May, the size of the ulcer was reduced to the central portion traversing the calf, the depth and situation of which rendered it somewhat difficult to manage; but, acetum cantharidis having been applied a second time to its margin, the whole was perfectly healed on the 30th of June. During the last month of her attendance she walked a mile and a half to my house three times a week, and took considerable exercise daily without pain or inconvenience.

There are some irregular varieties of ulceration of the leg, which cannot properly be ranged under any of the three classes into which these sores are distributed. Of such, the most common are erythematous and eczematous excoriations arising from inflammation of the integuments surrounding an ulcer. This vexatious complication is not unfrequently caused by the application of plaster-strapping, or unctuous dressings of a stimulating nature, to a sore which secretes profusely; but it is, at the same time, generally indicative of an irritable and unhealthy condition of the system, and requires for its cure a combination of constitutional and local treatment. In these cases, again, there is no local measure which so immediately tells upon the inflammatory state of the skin as leeches applied to the sore. I have heard patients make the remark, that they have watched the red excoriated surface gradually becoming paler under the loss of blood occasioned by a single leech. Afterwards, tepid-water dressing and rest, when the excoriation is severe and extensive, or, in slighter affections, astringent lotions, with support, will seldom fail in restoring the skin to health. Ointments almost invariably increase the mischief; and, when they have been employed, all remains of grease must be carefully washed away, and any scales or shreds of cuticle gently removed. It sometimes answers admirably to dust the cleansed surface with prepared chalk, or finely powdered starch; but, unless the inflammation decline rapidly, the crusts resulting therefrom will do harm.

During the last two or three years I have made numerous experiments with collodion in erythema, slight burns, chilblains, bed-sores, and other forms of soreness of the skin, and can state generally, that, whenever there has been any actual breach of surface, it has more often produced an injurious than a beneficial effect.

The conclusions at which I arrived with regard to its influence over erythematous inflammation surrounding ulcers I shall give more in detail. 1st. By sheathing and protecting the tender skin, I found collodion very serviceable in checking and removing such inflammation when unattended with excoriation; but, if allowed to remain too long adherent, moisture collected beneath it; and, when this occurred, the surface would be left in a more inflamed state than at first. The attempts I made to peel off the coating as soon as the object for which it was applied appeared to be fulfilled, frequently produced a good deal of irritation; and I have used, of late, collodion prepared with a slight admixture of oil, which is less obstinately adherent. 2nd. Whenever excoriation existed, or any exudation from the skin was noticed, it was of course difficult to form an adherent pellicle; but if, by drying the surface, this was effected, the moisture accumulated beneath the coating, and almost invariably occasioned a greater degree of excoriation than existed at the time of its application. In several instances in which I varnished over the newly-formed skin at the edge of a superficial ulceration, and extended the pellicle ever so little over the granulations along which it was shooting, the secretion from them, imprisoned beneath it, eroded the recently formed cuticle, and interrupted the healing of the sore. 3rd. On the other hand, when strictly confined to the cutaneous margin of the ulcer, I have often found this preparation useful in protecting both old and new skin against the mischief caused by acrid discharges. I have also employed it with the best effect in herpetic ulceration. In a case of this nature, which I attended in 1849, notwithstanding every mode of local and constitutional treatment adopted, the sore continued for months to extend in an annular form, healing at its inner margin, and spreading at its outer edge, until I tried experimentally a streak of collodion along the outer border, which at once arrested the progress of the ulceration; and, the application being repeated every second or third day, the ulcerated surface soon became perfectly cicatrised.

Of this property of sheathing and defending the skin from the action of irritating discharges, we may avail ourselves, to prevent excoriation taking place under other circumstances; round fistulous openings, for example, or cancer in the stage of ulceration. By Mr. Erasmus Wilson, Mr. Startin, and others, collodion is highly spoken of as an application in certain diseases of the skin; and it has latterly been much used as a topical remedy in erysipelas. Serviceable as it may prove in such cases, the trials I have made of it would rather incline me to doubt whether it is ever likely to become an auxiliary of any great value to the surgeon as an artificial epidermis.

In the classifications of some authors, sores of a specific nature form a separate variety of ulcers on the leg: but, as long as they retain their specific character, they are in no way distinguishable from such results of specific action occurring in other parts, and ought, therefore, to be withdrawn altogether from the catalogue, and referred to the diseases from which they spring. It is true that measures which are capable of successfully combating them elsewhere will often fail in *completing* the cure when the leg is the seat of the disease; but this arises merely in consequence of the local cause of intractability, peculiar to this region, supervening upon that engendered by specific disease—the local impediment to cicatrization remaining active long after the original source of the malady has become extinct—when, in short, the sore is converted into a simple chronic ulcer. A few months ago, at the Hospital for Diseases of the Skin, I saw two cases, originating in secondary syphilitic eruptions, in one of which five or six deep, ragged, painful ulcers on the calf and shin had subsisted for nearly three years after the constitutional malady had been eradicated. In both instances the sores healed readily and soundly under the ordinary treatment pursued by me for the cure of indolent ulcers.

It remains, finally, to sum up and consider the bearing of the various practical points here discussed upon the two questions,—first, of the comparative value of rest and support by bandaging in the treatment of ulcers; and, secondly, of the relative position which topical applications ought to hold with respect to these two principles.

It appears, then, *first*, that although *both* rest and support are especially adapted to counteract that morbid condition which is the substantial source of the intractability of ulcers on the leg, almost all writers on the subject agree in expressing great doubts of the permanence of the cure accomplished under the influence of the former. But, were they equally to be relied on for completing and maintaining the cure, in by far the majority of cases the circumstances of the patient absolutely prohibit the efficient employment of rest. On the score, therefore, both of its superior efficacy and of its expediency, the weight of experience may be very decidedly quoted on the side of support by bandaging.

And, *secondly*, if Whately and Baynton, by demonstrating that careful and judicious bandaging is capable of superseding topical remedies altogether in a very extensive range of cases, exposed, on the one hand, the fallacy of that exaggerated opinion of their virtues which was formerly entertained, it is clear, on the other, that they fell into the opposite error, and formed much too low an estimate of their real claims to consideration. And this mistake not only rendered their own practice less successful than it might otherwise have been, but has contributed to turn the scale once more in favour of rest employed in combination with them. Many of them are unquestionably very serviceable auxiliaries to both rest and support; the more important are essentially necessary as preparatory measures for the latter. But the fullest recognition of their true claims in no way brings them into competition with either principle, in relation to which they are no more than subsidiary forces, and ought never to have been raised to the rank of equivalents.

To come back, therefore, to the point from which we started, "instead of limiting our resources, by taking up and advocating any one remedy or line of practice exclusively," I contend that, while we show a readiness to avail ourselves of *all* special measures, constitutional as well as local, which are calculated to meet the numberless exigencies of the complaint, the bandage, properly constituted, must ever be looked upon "as the necessary superaddition to, or complement of," all other means of cure whatsoever.

16, Lower Seymour-street, Portman-square.

CASES IN SURGERY.

By HENRY SMITH, Esq., F.R.C.S.
Surgeon to the Westminster General Dispensary, etc. etc.

TUMOUR OF THE UPPER JAW.—NEW OPERATION.

Elizabeth P., aged 17, a very good-looking young woman, was sent to me in January last, with a tumour in the superior maxilla of the right side. She states, that about three years ago she had a blow on the nose, which was very severe, and which produced great pain. About six months afterwards she first noticed a swelling on the right side of the nose, but there was no pain experienced until a year and a half ago, when she began to feel uneasy sensations in the cheek and temple of the same side. Within the last four months the tumour has somewhat rapidly increased to its present size.

There is considerable disfiguration of the right side of the face, from a tumour protruding the anterior part of the superior maxilla; it is hard and apparently solid, involving the jaw nearly as far as the malar bone on the outer side, and extending on the inner side up the nasal process of the maxilla close upon the orbit; below, it overhangs somewhat, but does not implicate the alveolar body. There is no protrusion of the palate; the nose is distorted to the left side, but the nostril itself is clear. There is a considerable amount of pain produced when pressure is made upon the swelling. The general health in every respect very good.

As the disease had been latterly increasing in size rather rapidly, and was beginning to cause considerable disfigurement, the patient was very anxious to undergo an operation for its removal: and, as there was no contra-indication whatever, I determined to operate without much delay. It was obvious that the disease did not at present involve the whole of the jaw, and therefore there could be no necessity for excising the entire bone. I was most anxious to produce as little disfigurement as possible, and also to save the teeth on the same side; accordingly, on Thursday, February 5, I performed the operation in the following manner:—

The patient was placed in the sitting posture on a chair, and Dr. Snow got her well under the influence of chloroform. I commenced the operation by making an incision through the upper lip, and carried it into the right nostril, dissecting away the ala of the nose from the subjacent bone, without, however, carrying the external incision any further up. In this way I was enabled to dissect the soft parts of the cheek so completely up, that the whole front of the jaw was exposed. I now laid a small semi-circular saw horizontally against the lower surface of the tumour, and well grooved its circumference. By doing this it was discovered that the outer surface alone of the diseased mass was bony, while the interior of it was of a softer description; consequently, it was unnecessary to use the saw further, but with the bone forceps the greater part of the mass was clipped away. I then carried the blade into the nostril, and clipped across the nasal process of the maxilla above the tumour, and took away what was diseased. What remained of the mass was subsequently clipped and scooped away until a large cavity was left. The disease seemed to have originated in the front wall of the antrum, and to have encroached upon and completely obliterated this cavity. None of the teeth were injured during the operation. Three hare-lip pins were inserted across the wound, and the twisted suture applied, so that the edges were brought accurately together.

From the date of the operation, the patient progressed most satisfactorily; there was but little constitutional disturbance. The pins were removed on the 4th day, and the wound was found united; and a fortnight after the operation she was enabled to walk to my residence, and the only deformity arising from the proceeding was a very slight cicatrix along the upper lip.

My object in publishing this case is to draw the attention of surgeons to methods of operating in the removal of the whole or of a portion of the superior maxilla, by a method which is little known and much less followed. Doubtless one of the most important points in these operations, and indeed the most important under some circumstances, has reference to the incision which is made in the soft parts. The majority of those surgeons who have performed more or less severe operations upon the upper jaw have, in directing their external incisions, chiefly held in view the easiest

means of accomplishing the operation, and have not consulted the appearance of their patient afterwards. Thus it is that Lizars, Liston, and others have made sweeping incisions, not only through the lip and nose, but also through the whole extent of the cheek from the mouth to the orbit. Most operators have followed their instructions more or less. Then, again, if only a portion of the jaw-bone is to be removed, some surgeons have recommended other kinds of incisions to be made through the cheek in different directions, without much reference to the amount of disfigurement which may occur. Thus I have known one very eminent surgeon make an extensive cut through the cheek from the upper lip, midway between the angle of the mouth and median line, for the purpose of removing a small portion of the upper jaw; and on looking at the very latest work on Operative Surgery published in this country, I find that the extensive incisions of Liston are still recommended, while, for a more limited operation, the author has proposed an extensive cut, carried from the orbit to the angle of the mouth in a semi-circular direction.(a) This, I presume, would produce a most unseemly cicatrix.

There can be no doubt whatever that these sweeping incisions are not required in most operations upon the upper jaw, but that these serious proceedings, either on a great or limited scale, may be accomplished by means of incisions through the soft parts, which will leave scarcely any deformity. To Mr. Fergusson am I solely and entirely indebted for the knowledge of this fact. Within the last few years, he has seen the feasibility of removing great portions, and even the whole, of the upper jaw, with simply making an incision through the upper lip, and carrying it into the nostril of the affected side. He has now practised this method of operating on several occasions, at most of which I have had the honour of giving my assistance; and I have certainly been surprised to find what an extensive operation may be effected through the means of that small incision. The fact is, the soft parts are so extensible, and there is such an amount of room obtained when the nostril is cut into and the ala dissected up, that a large flap may be lifted upwards and backwards from the upper jaw, so that the saw, cutting pliers, and other instruments may be effectually worked. It will indeed be found possible to clip through the nasal process of the superior maxilla, as I did in this instance, without further extending the incision in the soft parts. At first, it would be difficult to believe this fact; but any one who has seen the operation performed will understand it, observing what an amount of room is gained by dissecting up the nostril. It may happen that a case will be met with in which it will be necessary to make more extensive cuts across the cheek; if, for instance, the tumour is excessively prominent, and involves the malar bone, or if it be deemed expedient to remove a portion of the skin. It is only a few days since I witnessed the excision of the upper jaw by Mr. Hancock, who executed the operation with admirable dexterity; and here it was thought needful to remove a portion of integument with the tumour, and therefore very free external incisions were required.

The object, of course, in the surgeon making this limited incision, is to prevent the frightful deformity which results after freely laying open the cheek. With all patients this is an object; but with some it may be of serious importance to be as little disfigured in the face as possible. The incision which is made through the median line of the lip produces the slightest possible amount of deformity; and it is, indeed, pleasing to contrast the appearance of a patient operated on in this manner with one upon whom the usual incisions have been practised. Four cases where Mr. Fergusson operated have occasionally been submitted to my notice. In one of them, operated upon by the *good* (?) old method, the cicatrization of the wounds have produced dreadful deformity; in the other three, it is difficult even to trace the line of incision. It is obvious, therefore, that it is an all-important matter, that those unfortunate persons who have to undergo so serious an operation as the removal of the whole or great portion of the upper jaw should be disfigured in the least possible way; and there can be no doubt, that the method which was followed by me in this instance, and which I learned entirely from Mr. Fergusson, is that from which the slightest will result.

Although it is practicable, not only to remove portions, but even the whole, of the superior maxilla, by means of this limited external incision, still it cannot be expected that the operation will be accomplished with such facility as when more extensive cuts are made. Doubtless, these operations, difficult and troublesome as they necessarily must be, will, when performed in this manner, exact more patience and tact on the part of the surgeon; still, the fact of there being more difficulty, or of the operation being protracted some minutes longer, ought to be no argument against working, as it were, in such a limited space. Much will depend upon the assistance which the operator has in those near him, for the purpose of stemming the somewhat violent gushes of blood which will flow from the coronary and other vessels, and holding up the flap of soft parts when he is about to use the saw or pliers. In my own case, Mr. Fergusson assisted me in that admirable and complete style for which he is remarkable in everything connected with operative surgery, whether he be principal or assisting. I find that Mr. Druite, in the last edition of his "Vade Mecum," has given a brief description of this method of operating; and I have little doubt that the Professor of Surgery in King's College will, in a future edition of his "Practical Surgery," describe fully the advantages of making limited incisions in removing the upper jaw.

In the above-mentioned case, the tumour consisted mainly of fibrous tissue enveloped in a covering of bone,—a form of disease not unfrequently met with in the upper jaw. It will be seen that the patient took chloroform, although by some it is considered so unsafe to give it in operations about the jaws and mouth. However, I have now seen so much of this agent administered during these operations by Dr. Snow without any untoward result, that I should never hesitate to recommend a patient to take it; it is, of course, impossible to keep up its administration by the ordinary apparatus. Dr. Snow usually effects this by applying a sponge to the nose and mouth; and the surgeon must pause every now and then for a few moments, to allow this being done, otherwise the patient will regain his sense of feeling, and the operation will be much complicated. In the present instance, Dr. Snow managed so well, as to keep the patient in a state of unconsciousness during nearly the whole time of the operation.

(a) Skey's "Operative Surgery."

TRAUMATIC NEURALGIA.

The following is an instance of an affection which is not unfrequently submitted to the notice of the surgeon, and which sometimes proves to be altogether uninfluenced by treatment of every description:—

Jane Turner, aged 22, single, and usually very healthy, but somewhat liable to hysterics, and at all times acutely susceptible of moral and physical impressions, applied as a patient at the Westminster General Dispensary, December 17, suffering most severely from neuralgia of the thumb. It appears that four months previously she had wounded the right thumb, just on the radial side of the last phalangeal joint, with the shell of a crab; this injury was followed by intense inflammation and swelling of the thumb and hand; suppuration took place; matter was evacuated by a free incision being made in the thumb. After this the inflammation subsided; but, as cicatrization of the incised part took place, the joint became gradually contracted; very severe pain was felt in the part, and this daily increased, and resisted the remedies which were applied.

I found the thumb so much contracted, that the last phalanx was bent nearly at right angles with the first. The member was much wasted, but the joint itself was swollen, and just at the outer side of it was a cicatrix about half an inch in extent. There was such intense pain when I touched the part that the patient could hardly bear to have it examined. She stated that the pain commenced at the cicatrix, and that the sensation was continued up her arm to the elbow; it was constant day and night, and prevented her from sleeping, and nothing gave her relief. Her health appeared good, but there was an expression of anxiety on her face. After a careful examination I considered that this was a case of traumatic neuralgia, and that there was no disease in the joint itself, although it was much swollen and painful; that in all probability some nervous filaments were implicated in the cicatrix, and thus caused the pain; and that the flexor longus pollicis tendon was contracted. I at first determined to try what local applications would effect, and employed ointments and liniments containing morphia and aconite; but there was no alleviation of the pain. After trying these measures for a fortnight, I

recommended her to apply a stream of cold water from a height, but the pain continued unabated. I now had the advice of an hospital surgeon, upon whose opinion I can generally rely, and he considered that it was an hysterical affection, and recommended that the patient should take a preparation of iron, and deprecated any surgical operation, which it appeared to me to be necessary to adopt. She took the sesqui-oxide of iron for two weeks, but without any benefit; and, as the pain continued so severe, I determined to try the effect of an operation. Consequently, on January 30, I divided, by subcutaneous section, the tendon of the flexor longus pollicis, and at the same time cut fairly across the cicatrix in a transverse direction, so that I was able to bring the thumb into nearly a straight position. A small splint was afterwards applied, and from time to time taken off and changed. After this procedure the pain entirely went away, and she was dismissed. At the end of a month, the patient called upon me to show me her thumb: it had become perfectly straight and natural in appearance. She has suffered no pain whatever, and is so grateful for her cure, that she has done what few dispensary patients do, viz., send a donation to the Institution as a mark of her gratitude.

That form of neuralgia which arises after wounds and surgical operations is often met with, and is very troublesome to treat satisfactorily. We sometimes see an instance of it after an amputation. The stump becomes exceedingly painful after it has nearly or entirely healed up. In such cases the pain arises either from a small portion of dead bone remaining, or from the ends of the nerves having become implicated in the cicatrix. Local applications, in the form of liniments or vapour, will do no good in such cases, or will only relieve for a time, and it will be found necessary to cut down upon the stump, and remove a further portion of bone, or the extremities of the nerves, which must be looked upon as being in a diseased condition. I was inclined, from the first, to look upon this case as very similar to the painful condition of a stump arising from the latter cause, and thought that the most effective practice would be to make a free division of the cicatrix, and at the same time divide the contracted tendon. I should have done so at an earlier period, but the affection was considered by another surgeon to be hysterical. That it was not so, is evident from the entire relief which the measure I adopted has afforded the patient. In instances of hysterical neuralgia, we find that, unfortunately, a cutting operation is perfectly useless, as one very deplorable case alone has shown me, where a surgeon amputated the thigh for hysterical neuralgia of the knee. This patient was under my care both before and after the operation, and when I last saw her she was suffering severely from neuralgia in the stump, which could not be alleviated.

Caroline-street, Bedford-square.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. THOMAS'S HOSPITAL.

By J. L. MILTON, Esq.

HERNIA.—SLOUGHING OF THE INTESTINE.—CURE.

However the opinions of men may vary respecting the steps to be taken in cases of sloughing of the intestine and the formation of artificial anus, few will hesitate to recognize in it a form of injury highly interesting to the practical surgeon. It is one of those lesions which any man may be called on at any time to confront, and in which error may be attended by the most serious results. In fact, hernia is an oak in the forest of surgery,—one of those things which no change affects as it does many other forms of lesion.

There are certain diseases and injuries with which the older surgeons were familiar, and which we now rarely see. Such a state of things may arise, that another generation will only know gun-shot wounds by tradition; the bite of the serpent will disappear with the extinction of the reptile race,—a consummation rapidly approaching; aneurism is becoming rare, and the category might be lengthened; but as long as man inhabits the globe, we may presume that hernia will continue to call for the surgeon's aid, and afford him employment.

Independent of this, it has always been considered of itself of vast consequence, and surgical teachers have ever striven to impress on the student's mind the necessity for making himself thoroughly acquainted with this branch of surgery. Hence, we think, no further remarks are necessary before introducing to our readers the following case under the care of Mr. Simon. For the notes we are indebted to Mr. Sankey.

J. G., a widow, aged 64, was admitted into St. Thomas's Hospital with a hernia, of which she gave the following account:—"She states, that eight days since she strained herself by overreaching, soon after which she vomited, and afterwards discovered a swelling in her left groin, which she thinks must have come suddenly. As the sickness continued, she applied to a surgeon, but mentioned nothing of the tumour. This gentleman only prescribed for the sickness. On the following day the existence of the hernia—for such the lump proved to be—was revealed to him, and he tried to reduce it, but without any success. He then prescribed aperient medicines, which seemed to have their proper effect, as the bowels were relieved and the sickness became less urgent, though it recurred occasionally. There was no pain in the bowels until two days before admission, but the lump in the groin grew rather tender, and obstinate constipation set in. Considerable doubts having arisen as to the nature of the tumour, she came to the hospital.

"On examination, a small, hard, and tender swelling was found in the left groin; there had been no action in the bowels for eighty hours; the patient suffered under occasional vomiting, and a dragging pain was felt at the umbilicus; but there was no peritonæal tenderness except in the close vicinity of the protrusion. She was now ordered a warm bath, and gentle attempts were made to reduce it, but without success. Mr. Simon, having consulted with his colleague, Mr. South, the operation was determined on, and performed by Mr. Simon on November 25, 1851.

"A cut, like a gibbet in form, was made over the swelling now augmented to the size of a small orange. It was then found that the deeper textures were much infiltrated and matted together, being undistinguishable, so that at times it appeared to the surgeon as if he were cutting a gland; the thickness of the parts thus divided was so considerable, that the sac, when arrived at, was not larger than the end of the thumb. When the last covering of the fascia transversalis was divided, pus escaped, and the question now arose, Was this a suppurating gland? If a hernia, was the bowel opened? Was the pus on the fingers impregnated with fæcal smell?

Mr. Simon leaned to the opinion that it was a hernia; such proved also to be the case. The sac was found opened, and Gimbernat's ligament divided; a very small point of intestine was found, covered with lymph; this was returned, and the bowels were almost immediately after copiously relieved.

On the third day after the operation, the wound began to look somewhat sloughy; on the fifth day the slough separated, and the wound left was healthy and suppurating; but, on the 4th of December, the discharge began to be turgid; and, on the 5th, was distinctly fæcal.

At this time the patient seemed to be suffering no inconvenience; and it was not till two days later, by which time the fæcal discharge had become very profuse, that any amount of constitutional disorder was observed. Mr. Simon was, however, from all the circumstances of the case, induced to give a favourable prognosis; nourishing diet and brandy were allowed. Collodion was applied round the suppurating surface, and the task of reparation was confidently left to the powers of nature. Nor was this non-interference any bar to the ultimate success of the case. By the 12th of December, fæces ceased to pass through the wound; and, on the 14th of January, she was considered quite cured.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

DEVON AND EXETER HOSPITAL.

By JOHN HARRIS, Esq.

Senior Surgeon.

OBLIGATION OF THE EXTERNAL ILIAC.

Edward Simons, aged 29, was admitted into the Devon and Exeter Hospital, under my care, on Tuesday, the 14th October, 1851, for an aneurism of the femoral artery on the left side, immediately below Poupart's ligament.

His history of the case was, that, on Tuesday, the 23rd September last, while at work in a lead mine, in the act of turning himself round quickly he felt something snap or give way in the groin. He suffered little or no pain or inconvenience at the time

nor did it prevent his continuing his work. He did not perceive any swelling until three or four days after, when some slight pain drew his attention to it. After some days, finding the tumour increasing, he showed it to Mr. Brown and another surgeon of Chudleigh, who advised his going to the hospital without delay. On examination, a very strongly pulsating tumour was observed just below Poupart's ligament, about the size of a turkey's egg. The pulsations were so powerful as to lift the hand very visibly when laid over the tumour. No doubt remained as to the nature of the disease. After a consultation with my colleagues, nothing short of tying the external iliac artery was deemed likely to afford him the least benefit. As he was in robust health, it was considered advisable to reduce his diet, and administer occasional laxatives for a week or ten days previously to the operation; the patient to be kept strictly in bed, and have cold applications to the tumour.

On Saturday, October 25, 11½ a.m., I performed the operation of tying the external iliac artery. The patient being very stout and muscular, the artery would evidently be found very deeply seated. A slightly curved incision, of about 3½ inches in length, was made a little above Poupart's ligament, extending from the anterior inferior spinous process of the ilium nearly to the symphysis pubis. After cutting through the tendinous portion of the external oblique muscle, and dividing the inferior margin of the internal oblique and transversalis, a small portion of the bag of the peritonæum descended into the wound. This was supported, during the remainder of the operation, by a flat blunt hook. The aponeurosis of the external oblique was extremely dense; the muscles generally were strongly developed, and, consequently, rendered the approach to the artery more difficult. The operation was now chiefly finished by separating the parts underneath with the fingers, and so exposing the artery. Its strong pulsations made it a distinguishing guide. After separating the vein with the nail of my forefinger, I was enabled, with some difficulty, to pass the aneurism needle, armed with a strong silk ligature, (from within outwards,) underneath the artery, and, previously to tying it, took care to feel the pulsations upon the ligature, and, by lifting it up and compressing the artery, ascertained that all pulsation ceased in the aneurismal tumour. The ligature was then tied firmly. Very little blood was lost during the operation. The wound was brought together with two sutures and adhesive plasters, supported by a T bandage and compress. The patient bore the operation remarkably well: 25 drops of Battley's sedative had been administered just before the man was placed upon the operating table; chloroform was deemed unadvisable. As soon as the patient was put to bed, the leg and foot were wrapped in cotton wool, surrounded by a flannel bandage.

25th, 7 p.m.—Very comfortable, to use the patient's own expression; pulse 68; a slight oozing from the wound, directed compresses, with cold water, to be applied; no pulsation in the tumour; the thigh, leg, and foot, quite warm; his bowels were freely moved this morning before the operation.

26th, 7½ a.m.—Has passed a sleepless night, but not in much pain; pulse 66; limb warm throughout.

7 p.m.—Going on apparently very well; pulse 70; little or no pain; tongue slightly coated; very little fever or thirst; leg and foot quite warm.

27th, 10 a.m.—Has had some sleep last night, and feels much refreshed by it. Some purulent discharge from the wound. Dressed it and found it looking well. No pulsation in the tumour, which is evidently diminished in size. The thigh and leg warm, but the foot and toes rather cold. The patient says he experiences no difference in the feeling of his feet; pulse 80; tongue clean; no heat of skin; indeed, he had less symptomatic fever than could have been anticipated.

28th to the 30th.—Has been progressing most favourably; the pulse varying from 80 to 63; the tumour gradually decreasing; a rather troublesome cough this evening, for which a draught was directed:—

℞ Pulv. trag. comp. gr. x., tinct. opii., camph. syr. papav. alb., aa. ʒi., aq. pur. ʒiss. Nocte sumend.

31st.—The draught composed him and relieved his cough; bowels moved; dressed the wound, and removed the two sutures; nearly two inches of the wound healed, and the remainder looking healthy; patient complaining of hunger; allowed a little improvement in his diet; the limb perfectly warm throughout. To repeat his draught at night.

Nov. 1st.—Wound granulating; discharge much lessened; pulse 70; pulsation felt in the course of the posterior tibial artery.

8th.—Has been going on most satisfactorily up to this time; the wound three parts healed; the ligature on the artery elongating slightly, but still firm; pulse ranging from 60 to 66; appetite good, allowed an egg in addition to his other diet; bowels quite regular; aneurismal tumour nearly disappeared.

21st.—His progress up to this time has been most satisfactory; ligature still firm.

Dec. 1st.—Gaining strength daily; put the ligature slightly upon the stretch.

5th.—Complained of having had pains in the affected thigh and leg during the night; rather feverish this morning; ordered him a dose of laxative pills directly, and some effervescent mixture every six hours.

6th.—Much better this morning.

14th.—This morning the ligature came away, after having been retained fifty days.

18th.—Wound in a healing state; pulsation felt in the anterior tibial artery.

30th.—Has been gradually gaining strength, and is enabled to walk about his ward with the help of a stick.

1852.—From the 1st of January to the 9th of March has been daily improving in his general health, although he has had to contend with a troublesome sinus in the course of the ligature with which the artery was secured.

March. 11.—He was this day discharged from the hospital cured.

On the whole, the case has progressed very favourably. There has been no indication of peritonæal irritation, and very little constitutional disturbance. May not this be attributed to the operation having been performed at so early a stage of the disease?

This is the sixth time the operation has been performed in the Devon and Exeter Hospital within the last twenty-five years, and five out of the six successfully. In the unsuccessful case the patient died from consequent peritonæal inflammation.

SCIENTIFIC LECTURES.

HUNTERIAN LECTURES ON THE ANATOMY OF INVERTEBRATE ANIMALS.

BY RICHARD OWEN, F.R.S.,
Hunterian Professor to the College.

This Evening, April 17.—Lecture XV.—*Epizoa and Cirripedia.* General characters of these parasitic Articulata. Arrested development of the dwarf-males of Epizoa. Gradation of forms in the Orders Penellina, Lernæodæa and Ergasilina. Their parchment-like integument, characters of Chitine. Organs of prehension and adhesion. Muscular system. Nerves and organs of sense: gradual obliteration of the eyes. Straight and simple alimentary canal. Vasiform heart with two terminal orifices. Diffused venous system. Male organs of Achtheres. Complex female organs of Epizoa: their external ovisacs. Development of embryo and retrograde metamorphosis of the young into the adult animal. Division of the Cirripedes into the orders Balanoidea and Lepadoidea. Chitinous integument, structure, and composition of the progressively complicated shell: position of the animal in its shell: muscles of the shell and operculum: of the pedicle; the jaws and the feet or articulated cirri. Ganglionic subabdominal nervous system: obliteration of eyes in the attached adults: sensibility of the cirri. Lateral maxillæ, stomach, intestine, and hepatic follicles. Dorsal vasiform heart, arteries, and diffused veins. Organs of generation of the Cirripedia; conflicting opinions respecting them: some are androgynous. Dendritic testes: glandular sperm-ducts and long proboscidiform penis. Ovaria, their different position in sessile and pedunculate Cirripeds: extreme metamorphosis in this class.

Tuesday, April 20, and Thursday, April 22.—Lectures XVI. and XVII.—*Crustacea.* Characters of the locomotive Articulata provided with jointed limbs and gills. Primary division of the class indicated by the number of the segments of the crustaceous skeleton. Entomostraca and Malacostraca; the latter subdivided into Macroura and Brachyura. Organization of the Entomostraca illustrated in the Limulus. External skeleton in the Malacostraca. Process of moulting. Progressive concentration of the nervous system. Organs of sense. Mandibles and maxillæ and their palpi. Organs of digestion and secretion. Heart, arteries, and diffused venous sinuses. Gills and modification of breathing organs in land Crabs. Male and female organs in the Macroura: Bursa copulatrix of Brachyura. Subcaudal acetabula and egg-plates. Development of ovum and germ. Metamorphosis of Crangon: larval Zoea and Megalops of the Brachyura. More direct and regular development of the Craw-fish. Transitory manifestations of characters and structures of inferior Crustacea in the course of the development of the higher species.

Saturday, April 24.—Lecture XVIII.—*Insecta.* Principles on which the Articulata with jointed limbs and tracheæ are classified: primary division according to the number of the segments of the chitinous skeleton: subdivision of the Myriapoda and Hexapoda. Composition of the skeleton and its appendages; orders of Hexapod Insects according to the structure of the wings. Modifications of the nervous system: organs of sense; antennæ, palpi. Structure of the mouth in Haustellate and Mandibulate Insects. Examples of the manifold modifications of the alimentary canal. Salivary, biliary, and urinary glands. Circulating and respiratory systems.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, April 17.—Medical Society of London. *Subject:*—Dr. T. Snow Beck, F.R.S., "On Inflammation of the Vagina." Eight o'Clock.

Monday,	April	19.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock
——	——	Chemical Society. Eight o'Clock.
——	——	Statistical Society of London. Eight o'Clock.
Tuesday,	April	20.—Royal Institution. *Subject:* — E. Lankester, M.D., "On the Physiology of Plants." Three o'Clock.
——	——	Pathological Society of London. *Meeting of Council.* Seven o'Clock.
Wednesday,	April	21.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.
Thursday,	April	22.—Royal Institution. *Subject:* — R. Westmacott, Esq., R.A., "On the History and Practice of Sculpture." Three o'Clock.
Friday,	April	23.—Royal Institution. *Subject:* —Rev. Professor Baden Powell, "On the Analogies of Light and Heat." Half-past Eight o'Clock.
Saturday,	April	24.—Royal Institution. *Subject:* — Professor Faraday, "On Points Connected with the Non-Metallic Elements." Three o'Clock.
——	——	Medical Society of London. *Subject:*—Mr. Pilcher, "On Metastasis." Eight o'Clock.

Medical Times & Gazette.

SATURDAY, APRIL 17.

TRANSPORTATION OF AN APOTHECARY.

William Hamlyn Pascoe, a licentiate of the Society of Apothecaries, of twenty-nine years' standing, and lately practising at Cubert, in Cornwall, has been sentenced to transportation for ten years, for the alleged crime of administering savine to a woman for the purpose of procuring abortion. After an attentive consideration of the case, as reported in the *West Briton and Cornwall Advertiser*, of April 2nd, we find ourselves unable to agree in the verdict of the jury, or in the sentence of the judge; and we are fearful that an innocent man has been unjustly and ignorantly condemned. In another column our readers will find as much of the evidence extracted as our space will permit; and we shall proceed to make a few remarks upon it, begging the reader to go over, in the first instance, our abstract of the report of the trial.

1. There is not, throughout the case, the least evidence to show that Mr. Pascoe was at any time aware of the pregnancy till the birth of the child.

2. His first prescription, "compound iron mixture," is that of a man attempting *bonâ fide* to treat a disease. Therefore, there was evidently, at first, no concerted plan between the parties.

3. His second prescription, oil of savine and friars' balsam, was ordered at the second interview, when the woman might have told him either that the catamenia were suspended, or that she was pregnant, and wished abortion to be produced.

4. If Mr. Pascoe is to be believed, the first supposition must be adopted, but the jury came to the conclusion, that the second supposition was the true one, on the medical evidence given by Mr. Moorman, a surgeon, *that no medical man would administer savine, except to produce abortion.* This statement is, in our opinion, a thorough mistake from beginning to end. The following extract will show the kind of evidence on which Mr. Pascoe has been condemned:—

"*Mr. Moorman (by the Judge):* In your judgment, would a man of competent knowledge prescribe that (14 drops of oil of savine in 21 hours) in such quantities, except for abortion? *Witness:* I think a man of competent knowledge would not. *Mr. Stock:* Looking at the nature of the thing, and the quantity, is it such as a man ought to prescribe for any proper purpose? *Witness:* I think not medically, or for any legitimate purpose. *The Judge:* Then, in your opinion, such quantities would indicate want of skill in the medical man who prescribed, unless his purpose was abortion? *Witness:* It would, my Lord, unless the object were abortion."

How fatally this evidence told against the unfortunate prisoner is evident from the judge's summing up.

"He (the prisoner) wrote a prescription, which, according to Mr. Moorman, if he was a man of competent skill, he must have known would answer no beneficial purpose, and would answer only the purpose of procuring miscarriage. . . . . Savine was formerly used in cases of suspended menstruation; *but no man of competent skill, according to the present education of medical men, would use it.* It was popularly known, said Mr. Moorman, as the means of producing miscarriage."

The unlucky Pascoe attempted to parry Mr. Moorman's evidence by stating, that he had found savine highly recommended as an emmenagogue in "Hooper's Medical Dictionary," and a prescription given for the proportion, and that he had used it accordingly. Whereupon Mr. Moorman says—

"I know there is a book called 'Hooper's Medical Dictionary;' I do not use it myself, but have known it used by medical men; it is not in general use. I consider it an old-fashioned book. I am not aware that in 'Hooper's Medical Dictionary' there is a prescription of the amount of savine and friars' balsam to be used in diseases of the womb."

Now, the eighth and last edition of "Hooper's Medical Dictionary" was published in 1848, and was edited by Dr. Klein Grant. So far from being an old-fashioned book, it has a considerable reputation and sale. At page 807, savine *is praised as an emmenagogue*, and its occasional failure is ascribed "to the smallness of the dose in which it has been usually prescribed by physicians." We have little doubt that the actual prescription mentioned by Mr. Pascoe might be found in some former edition.

The whole evidence with regard to *intent*, viz., that the prisoner intended to produce miscarriage, is based on the fact of his having written this prescription, and on the erroneous testimony of Mr. Moorman. The judge and jury are made to believe that no competent medical man would order savine as an emmenagogue! The prisoner quotes his authority, and his authority is sneered down. Mr. Moorman did not know "Hooper's Dictionary," but did he not know, or could he not obtain, the works of A. T. Thomson, Christison, Pereira, or any other of our standard writers on Materia Medica, who all mention savine as an emmenagogue and do not condemn its employment?

The dose, also, in which the oil was administered by Mr. Pascoe was below the amount frequently given. Thomson orders from two to six drops for a dose, and Mr. Pascoe only ordered four and a half.

If this evidence of Mr. Moorman's had been upset—and it could not have stood for a moment—the whole case for administering the savine *with intent* would have broken down, and the prisoner have been acquitted. The counsel for the prisoner must have handled his brief most inefficiently, and the other medical men who were in court, when they heard such evidence without immediate contradiction, are deeply to blame for not having advised the barrister of the nature of the evidence on which the issue of the case absolutely depended.

5. The savine did not produce abortion, but, after being used for some days, was discontinued some weeks before the birth took place; and afterwards there is no evidence whatever of any deleterious drug being given, or of any attempt being made in any way to produce abortion. If

Mr. Pascoe gave savine to procure abortion, would he not have increased the dose, instead of leaving off the medicine altogether?

6. Mr. Pascoe's own story is a very likely one: he states, that the woman quite deceived him with regard to her pregnancy; that, being the daughter of a respectable man, and really suffering under organic disease of the heart, (a fact confirmed by Mr. James,) he never even suspected pregnancy until the birth of the child. Is there a single medical man in these kingdoms who has not been deceived, or known others deceived, in the same way?

7. The circumstances which gave colour and strength to the suspicion excited by Mr. Moorman's evidence, were these:—Some time after the woman had discontinued the savine she returned from her own home, some miles distant, to Cubert, Mr. Pascoe's place of residence, and requested his servant to allow her to remain in the house. This was permitted, and she remained there some days; but, according to her own account, never mentioned to Mr. Pascoe the fact that she was pregnant. At length, labour came on, and she was delivered of a still-born child. There is no attempt made to show, that while in Mr. Pascoe's house any method whatever was employed to produce abortion, and the woman herself declares on oath that Mr. Pascoe was ignorant of her state.

After the birth, Mr. Pascoe, without the least attempt at concealment, sent for the sexton, and told him to bury the child. The sexton marched off to the churchyard, met several persons by the way, and, without any precautions, dug a hole and put in the body. A curious woman, who saw him carrying the bundle, and could not sleep till she had penetrated the mystery, re-opened the hole, and discovered the body. A coroner's inquest was then held. In explanation of his conduct, Mr. Pascoe stated, that he was not in the house when the child was born, but that he had determined, in order to save the woman's character, not to make any public exposure, but simply to get the dead child buried by the sexton of the parish.

Our readers will observe, that Mr. Pascoe was not tried for this, but for prescribing savine some weeks before; and that these circumstances are only material, in so far as they may bear upon his *intention* in previously administering savine. Now, so far from these circumstances injuring Mr. Pascoe's cause, they strengthen it. It is evident that he acted very unwisely, but is it conceivable that any man who has produced abortion should thus voluntarily put his secret into the hands of the sexton of the parish? Indeed, on the supposition of his guilt, the unfortunate man has acted throughout in the way most likely to lead to detection. When he administers savine, instead of a mysterious bottle and profound injunctions of secrecy, he writes a prescription, and, although his name is not attached to it, he directs it to be made up at a druggist's who knows his handwriting; and, when the child is born, instead of choosing the obscurest glen and the midnight hour for the place and time of the interment, he sends for the parish sexton, and has the burial performed under the very eyes of witnesses.

We earnestly trust that some influential members of the Profession will bring this case under the notice of the Secretary of State, and that the evidence may be fully reconsidered before this gentleman is sent to expiate, among felons and murderers, a crime of which we firmly believe him innocent. And we call on Mr. Moorman, whose testimony has led both judge and jury to so erroneous a conclusion, at once to make the reparation he is bound to do, and compensate, as far as he can, by a manly avowal of his error, for the misfortunes which have overwhelmed his unhappy professional brother. Mr. Pascoe was justified in prescribing oil of savine by the united authority of the most eminent writers, if, as he states, he believed the case to have been one of amenorrhœa; and if the mere administration of a drug of this kind is to be held as sufficient evidence of an intent to cause abortion, no medical man whatever is safe. Mr. Pascoe *may* be guilty, and facts may be extant which are not included in the long report before us; but, judging only from that report, we cannot hesitate a moment in stating our profound belief, that an innocent man has been most improperly, and we would almost say wantonly, stigmatised with a crime which he never committed, on medical evidence which is utterly worthless and untrue.

THE MEDICAL BENEVOLENT COLLEGE.

This scheme appears to have secured the cordial co-operation of all classes in the Profession. We do not remember any undertaking of the kind which, in the course of one short year, has been encouraged by so large a number of subscribers; and there are few which have, in the same period, realised so large an amount. By referring to the late advertisement in our columns, it will be perceived that nearly a thousand new subscribers have, within the last two months, sent in their names, and that the contributions amount to about 7,000*l*. This is highly gratifying; it speaks well for the members of the Profession, from whom and their immediate friends the subscriptions have chiefly emanated.

The Council can now appeal, with good grace, to the public to assist in providing for the necessities of a body of men to whom unquestionably they are much indebted. The cause is a good one, and the management entrusted to good hands. There is nothing mystified or one-sided about it. The only thing which startles is its rapid and steady advance; and more so when we consider that it originated in no distinguished association, but that it owes its birth and progress to a single individual in extensive general practice. Mr. Propert is identified with the proposed College, and the College with him. The Profession certainly are under obligations to that gentleman; and the members of it have fully evinced by their munificent subscriptions the sense they entertain of his exertions. Many who were once cold and doubting in the cause, and even opposed to the demonstration, are now warm and energetic in its behalf. It may now be said to possess all the elements of success, and to be progressing steadily to full development. The Benevolent College has our good wishes, and Mr. Propert our thanks.

THE ENSUING GENERAL ELECTION.—NAVAL ASSISTANT-SURGEONS.

We earnestly entreat the attention of our medical brethren throughout the kingdom to the fact, that the Resolution of the House of Commons, April 8, 1850, which declared "that the accommodation provided for Assistant-surgeons on board Her Majesty's ships of war is inadequate and insufficient for securing the full benefit of their professional service," has only very partially been acted upon by the Lords of the Admiralty, whose Circular of July, 1850, divides (most illegally) Assistant-surgeons into two classes, viz., those who have served less than three years, and those who have served for that period, and have passed their examination for surgeon,—the latter class only being admitted to the ward-room among officers of their own rank. The effects of this Admiralty Circular are—

1. Injury to the public service, by deterring the men of

the highest attainments from entering the navy; for men of this stamp refuse to submit to this three years' probation.

2. Injustice to those under three years' standing already in the service, inasmuch as they are invidiously and improperly lowered in position with their brethren, (the senior Assistant-surgeons,) who possess a rank the same as their own; a circumstance tending to engender discontents and jealousy, and altogether detrimental to the well-being of the public service.

The assumption of the power of conferring privileges on a section of a class of officers of the same rank, we hold to be an unconstitutional usurpation of the Queen's prerogative: for Her Majesty alone, in Council, has the power of defining rank and precedence among her subjects.

We trust, then, that the medical electors, before giving their votes, will require from the Parliamentary candidates, that they shall do all in their power to remove the insult given to the Medical Profession by consigning any of its members serving in Her Majesty's navy to the midshipmen's berth,—a place unsuited to their age, rank, and profession, even for three years; and shall also contend, in their places in Parliament, for ward-room privileges, *i.e.*, WARD-ROOM AND CABIN ACCOMMODATION; AND A SERVANT FOR THE ASSISTANT-SURGEON FROM THE HOUR HE ENTERS THE NAVAL SERVICE.

THE LOSS OF THE BIRKENHEAD.

BEFORE a man traduces the character of another, it behoves him to make sure of the truth of the evil reports to which he gives currency. Had some of our contemporaries acted thus, they would not have written as they have concerning the Assistant-Surgeon of the Birkenhead.

The facts seem to be these:—After all the boats had left the unfortunate ship, and when the poop was on a level with the sea, Mr. Culhane left the wreck, being the last person who did so, and swam towards the shore. After swimming more than a mile, he reached one of the gigs, containing nine men. As daylight broke, they saw at a distance a schooner, which they endeavoured to reach. Failing in this object, they pulled to shore. Mr. Culhane concludes his statement thus:—

"I reached Port D'Urban about 3 o'clock p.m. The day after the wreck rode on horseback from there to Cape Town, and arrived at Simon's Bay in about twenty hours from the time I started; and, after pulling a share of about fifty miles, and riding about 110 miles across the country, I am sorry to hear that it has been said that I left the boats. We saw the schooner tack and come in the direction of where we last saw the cutters, and she hove to, as if to take them on board, and afterwards steer towards the wreck. We should be very glad to be there at the time, as we dreaded that we could not get a landing-place. I assure you that I tried every effort to reach you, in order that you may be able to send a steamer to the wreck, and that was the object of the other eight of the boat's crew."

Instead of blame, Mr. Culhane deserves, as we said last week, considerable credit for the part he performed in this sad affair.

MEMOIR OF THE LATE DR. ANTHONY MUSGRAVE, OF ANTIGUA.

AT a time when the honour of our Profession is assailed even by many who should be its guardians, the loss of every faithful member, wherever may be his sphere of action, is to be deplored; but, where much professional skill, and earnest zeal in doing good, are combined with brilliant talent, and every quality of heart which can endear man to man, such a loss is not merely a professional, but a public one.

It will, therefore, be with feelings of real sorrow that many of our readers will learn, that the last West India Mail brought with it intelligence of the sudden death of Dr. Musgrave, of Antigua; and we feel that we shall be discharging our duty as Journalists, and, at the same time, affording a painful gratification to many with whom the name of Musgrave is associated with early and happy recollections, by publishing the following Memoir, for which we are indebted to one of his personal friends, as well as to the columns of one of the public journals of the colony.

Dr. Musgrave was a descendant of a family long established in Antigua, where he was born in November, 1793. He received his classical education under Dr. Shaw, at Edmonton, and proceeded, in 1811, to Edinburgh for his professional education, becoming a house-pupil of the late Dr. John Thomson. In the Medical Society of that city he displayed great argumentative power and eloquence, and was, in consequence, elected one of the Annual Presidents, together with Dr. John Davy, Dr. Richard Bright, and Dr. Thomas H. Burder, all subsequently brilliant ornaments of their Profession.

In June, 1814, he received his degree of Doctor of Medicine, having first publicly defended his inaugural Dissertation, which was "De præcipuis morbis Indiæ occidentalis," and in 1815, having rejoined his eldest brother, Mr. William Musgrave, then a rising barrister at the Antigua bar, he entered into partnership with Dr. M. H. Daniell, and, the following year, had a large field for exhibiting his professional skill and indefatigable zeal in combating the fearful epidemic of yellow fever which broke out in the month of June, and of which he recorded a history in the *Medico-Chirurgical Transactions* of London. His partner narrowly escaped death from this epidemic, ascribing the preservation of his life to the untiring personal watchfulness and attention of his young professional associate.

Dr. Musgrave was elected a Member of the House of Assembly in 1817, and, having acquired property and identified his own interests with the welfare and prosperity of the colony, he discharged his legislative duty with diligence and ability, distinguished as a debater alike for his close reasoning and persuasive eloquence; and the records of the Assembly bear testimony to the great zeal and talent which he exhibited as a writer in the public service, every document of importance, for a series of years, having been prepared either by Dr. Musgrave or the Speaker himself.

In the year 1820, Dr. Musgrave married; and in 1824, feeling the first symptoms of affection of the heart, and sensible of the necessity for some assistance in his arduous professional labours, he entered into partnership with the late Dr. Robert Crichton, Dr. Daniell having at this period retired from practice. In the course of the same year, he was appointed Treasurer of the island, which office he continued to hold until his decease. The ability and earnestness with which he discharged this public duty will long be cherished by the residents of Antigua: but *we* are more immediately concerned with his professional career.

Dr. Crichton having died in the year 1827, Dr. Musgrave formed a partnership with his senior assistant, Dr. Thomas Nicholson, with whom he lived in professional connexion, and on terms of the warmest friendship, until his death.

Dr. Musgrave visited England from time to time, seeking relief for a while, by absence from professional duty and repose in the mother country, from the depression occasioned by the progressive disease of his heart. On these occasions the society of his early friends, Dr. Robert Renton, Dr. Robert Lee, Dr. Marshall Hall, and others of the highest professional rank, greatly comforted him. These friends were earnest in persuading him to come and settle among them, expressing their confidence of his success; but his reply invariably was, that he "belonged to Antigua."

In 1840, Dr. Musgrave accompanied his eldest son, a young man of the most promising talents and disposition, whose career of study at King's College, London, had been rewarded with the highest honours, who was proceeding to the Northern University, the *Alma Mater* of his father, for the purpose of completing his professional education. There Dr. Musgrave was, by the inscrutable dispensation of an Almighty Providence, plunged into the deepest affliction. His fondest hopes were blasted; his promising son, a few weeks after entering upon the duties of physician's clerk in the Royal Infirmary, fell a victim to typhus fever.

Dr. Musgrave did not contribute so much to medical

literature as the promise given by the early dawn of his professional life might have led us to expect. This was chiefly owing to the contracted field of his professional labours, and the numerous other avocations which the maintenance of a large family compelled him to follow. He had no taste for those branches of science that have not an immediate reference to the art of healing. He had no time to devote to that knowledge which, for its own sake, is so attractive to the natural philosopher; all his energies were directed to the discovery of the best method of treating disease, and relieving the sufferings of those committed to his charge.

He was a strong advocate for blood-letting in the early stage of tropical fevers, all of which, whether intermittent, remittent, or the graver form of yellow fever, he considered as varieties of the same genus, and proceeding from the same cause; namely, exhalations from the surface of the earth, under the influence of a high degree of solar heat. He was also strongly opposed to the opinion of the contagious nature of these fevers, under any circumstances; and he was provoked, by a criticism of Sir Gilbert Blane in his paper in Vol. IX. of the *Medico-Chirurgical Transactions*, to enter into a contest with that advocate of contagion. These papers are contained in the *extra limites* department of one of the early volumes of the *Medico-Chirurgical Review*. He also published some papers upon Colic in the *Medical Repository* for 1823, as well as subsequently in the *Medical Gazette*.

During a visit to Edinburgh in 1826-27, he was grieved to find that strong prejudices were entertained by many of his friends against the use of mercury, and that most of the loathsome diseases which are termed syphilitic, or syphiloid, were attributed to the use of this therapeutic agent. He felt himself bound, therefore, at the hazard of offending many for whom he entertained the highest respect, to enter his protest against this opinion, in a valuable paper published in the *Edinburgh Medical and Surgical Journal* for that period.

As a physician, Dr. Musgrave endeared himself to his patients by his polished manners, his gentle sympathy, and his unremitting attention; while, as a legislator, his high integrity, ability, and efficient discharge of duty, made him respected by every one. Truth was his motto, honesty his policy, affection his failing. Those who knew him intimately esteemed and loved him for his pre-eminence in the private character of husband, father, brother, and friend. He leaves a widow and large family to deplore his loss.

REVIEWS.

On the Nature and Treatment of the Diseases of the Heart, etc. By James Wardrop, M.D. 8vo. Pp. 587. London: Churchill. 1851.

When we consider that diseases of the heart have been the special study of many of our most distinguished physicians from the time of Corvisart to the present day, we shall be prepared to admit, that if it be easy to compile a good treatise on cardiac diseases, it is by no means easy to write an original one. But Dr. Wardrop, by abandoning the beaten track of physical signs, and directing his attention more particularly to the physiological symptoms of cardiac disease at an early period, has contrived to produce an admirable work of original character.

The first six chapters of Dr. Wardrop's treatise are devoted to physiological considerations, and contain many views, either completely novel, or rendered so by the manner in which they are developed and followed out by the writer.

Our limits will not permit us to lay a complete view of Dr. Wardrop's physiological researches before our readers; we must content ourselves with a brief notice of those points which seem most novel and worthy of attention.

The functions of the heart, or the circulating organ, are associated with the functions of other systems, which are accessory to the former, and assist in promoting or regulating them. Considered in this point of view, Dr. Wardrop considers that he has established the existence of three functions connected with the circulation of the blood, which have been hitherto overlooked. These are the *musculo-cardiac*, the *pulmo-cardiac*, and the *veno-pulmonary* functions.

That muscular contraction is a means of accelerating the flow of venous blood was long known to physiologists. Haller observes, that "the voluntary motions of the muscles urge the venous blood on to the heart, which, being thereby oftener stimulated, makes more frequent contractions." He likewise explains the difference in frequency between the morning and evening pulse on the same principle. But Dr. Wardrop justly remarks, that muscular contraction must affect the adjacent arteries likewise, and hence he lays it down as a general law, that—

"The contraction of muscles increases the quantity of blood within the heart, either by accelerating the flow of venous blood towards the right side of the organ, or by impeding the exit of arterial blood from the left side."

This is the musculo-cardiac function; it enables us, our author thinks, to account for many hitherto unexplained phenomena which are constantly taking place in the living body.

Some muscular movement precedes every effort made to increase the vigour of particular organs, because to do so the vigour of the heart itself must be first increased. Observe what takes place on awaking from sleep. The position of the body is changed, the limbs stretched, various muscular motions affected, the heart stimulated by an increased quantity of blood, and additional quantity propelled to the brain, and, finally, revival of the mental powers. Before making any violent exertion, certain muscles become set, in order to stimulate the heart; and this act appears almost instinctive. On recovering from syncope, general convulsions often occur. Why? Because, Dr. Wardrop says, the heart requires an increased quantity of blood to stimulate it. Many other illustrations might be added.

The respiratory apparatus, more than any other, influences the functions of the heart. This fact also was well known to Haller, who shows "how the blood will flow with greater ease and celerity into and through the vessels of the lungs during inspiration, and how expiration urges the venous blood to the left side of the heart, while, at the same time, it impedes the flow of blood into the pulmonary artery from the right ventricle;" or, to use Dr. Wardrop's formula, "Inspiration is accessory to the *venous*, and expiration to the *arterial*, circulation—the one aiding the heart like a sucking, the other like a forcing pump."

This simple principle is applicable to the explanation of many of the associated acts of the heart and respiratory organs. The illustrations brought forward by Dr. Wardrop are ingenious and convincing. But, in addition to these offices of the respiratory apparatus, which simply depend on changes in the capacity of the thorax, the lungs themselves, our author says, perform a special accessory function, which he denominates *pulmo-cardiac*, and which enables the heart to accommodate itself to the incessant variations in its supply of blood.

"Every muscular movement, the state of the stomach, the exercise of the mind, the varied positions of the body, all influence, directly or indirectly, both the influx and efflux of the heart's blood."

How does the heart accommodate itself to these constant changes? By means, Dr. Wardrop considers, of the pulmo-cardiac function. Whenever the balance of circulation is considerably disturbed, either by increased flow of venous blood to the right heart, or by impediment to the exit of arterial blood from the left, the pulmo-cardiac function is called into play, and the easily-dilated vessels of the lungs receive and retain a surplus quantity of blood until it can be received within the heart. The respiratory acts are necessarily modified by the change of circulation in the lungs, and hence we find, that, unless the supply of blood to the heart be uniform, respiration is constantly changing; sometimes the expirations, sometimes the inspirations, are prolonged, or *vice versâ*. Finally, as the lungs relieve the heart from any surplus quantity of blood which it cannot receive within its cavities, so the venous system performs a peculiar function—the veno-pulmonary—of in its turn receiving any surplus quantity which the pulmonary vessels might be unable to retain without considerable disturbance to the respiration. Thus we find that whenever the circulation in the heart is disturbed, either by physical or moral causes, certain instinctive changes take place in the functions of the respiratory apparatus, whereby the healthy condition of the circulation is again restored. The development of this proposition forms the most interesting and original part of Dr. Wardrop's work. The deep inspirations, and the short, frequent

expirations of laughter increase the quantity of blood within the heart. Crying, on the contrary, which consists in a series of violent and long-protracted expirations, unloads the left side of the heart. Hence, when mental or bodily suffering has disturbed the heart, the relief experienced by crying, an act resorted to throughout the whole animal kingdom to relieve that organ from the congestive effects of pain. On the same principle, we can explain "the fulness of the heart," and even the pain in the cardiac region, experienced by those who are unable to weep when they sorrow. *Sighing* relieves a congested heart, through its full inspirations; and *yawning* likewise.

After some preliminary remarks, Dr. Wardrop next proceeds to examine the causes of disease of the heart in general. The most frequent and influential are atmospheric changes, alterations in the qualities of the blood, sympathetic influence of the principal systems, as the digestive, respiratory, etc., and cardiac congestion. This latter morbid condition has been neglected by nearly all systematic writers on diseases of the heart, although it precedes or accompanies, Dr. Wardrop says, almost every disease of that organ.

The means whereby the economy is enabled to relieve temporary and moderate states of congestion in the heart have been already noticed. When these means are insufficient, the blood begins to accumulate in the *right* side of the heart, and subsequently in the branches of the pulmonary artery. The accumulation of an undue quantity of blood in the right heart and in the branches of the pulmonary artery, is described by the author as the first stage of cardiac congestion. Violent muscular exertion is its most frequent cause; mental emotions, suppressed evacuations, etc., are also exciting causes.

Six chapters devoted to the physiological symptoms of diseases of the heart come next, followed by a single chapter on the anatomical symptoms. Thus the author devotes nearly his whole attention to the constitutional symptoms, passing over the physical signs in a cursory manner. This course is directly opposite to that pursued by all modern writers on diseases of the heart; but it has the merit of directing our attention to a class of phenomena which have been too much neglected in later years, while the author flatters himself that it may lead to an earlier detection of heart disease than is possible from a consideration of physical signs alone.

From causes our author naturally passes to symptoms. These latter are described with the greatest minuteness, being distinguished according to the several systems in which they manifest themselves.

Thus we have—

"Symptoms of diseases of the heart derived from the cerebro-spinal system, from the respiratory system, from the vascular system, from the digestive system, from the uterine system."

It is impossible for us to go over this wide field with the author; a single citation must suffice. Speaking of the influence of the heart on the brain, Dr. Wardrop remarks, that

"An interesting field of research is here opened for those who are employed in investigating diseases of the mind. I am convinced, that, in many cases of insanity, the primary cause of the condition of the brain will be found in the heart, more especially in those examples of mental aberration where the heart has been 'broken' from mental affliction."

In the chapter on Physical Signs we find nothing worthy of particular notice. It is followed by a very complete treatise on the remedies employed for the treatment of diseases of the heart; after which the author proceeds to examine the particular diseases of the organ. Chapter XXI. is devoted to congestion,—a subject on which we have already touched.

Functional disorders are examined successively, according as they arise from diminution in the quantity of the blood, changes in its quality, disorders of the nervous system, or from sympathetic consent with the digestive, cutaneous, genito-urinary, and capillary systems. The last nine chapters of the work are devoted to organic diseases of the heart. Dr. Wardrop commences this portion of his treatise with gouty inflammation of the heart, a subject which he may fairly claim as his own, not only from the complete manner in which he handles it, but from the fact of its having been almost entirely overlooked by preceding authors. To attempt any analysis of this section would be doing injustice to its author. We must, therefore, refer our readers to the original; and, if they derive from its perusal the same pleasure and instruction which we have, their time will have been well bestowed. Dr. Wardrop's treatise on the diseases of the heart not only abounds in novel views, but is eminently calculated to assist the practitioner in the treatment of a class of diseases which, despite modern pathology, are not yet perfectly understood, or, if discovered, become revealed to us when a knowledge of their nature is of little avail.

Home Truths for Home Peace; or "Muddle" Defeated: a Practical Inquiry into what chiefly Mars or Makes the Comfort of Domestic Life. Second Edition. London: Effingham Wilson. 1852. Pp. 176.

The principle of action for which the Author of this little work contends, is intimately associated with our well-being and prosperity. Slovenly habits in the man are generally the consequences of the home-habits from which he emerged into the busy world. Nine times out of ten they were acquired in domestic life—have grown with his growth, and are pretty sure only to end with his decay. We were lately present at a lecture on chemical science, where the lecturer pointed first to one diagram with a gas-delivery tube, and to another with a deflagrating ladle; while his chemicals were *dis*-arranged in such confusion, that he smelt several bottles before he could detect his sulphuric acid. "Muddle" was the supreme deity. To strike at the root of such influences, our Author exposes "muddle" in its cradle—in the first dawn of domestic life. The little book is valuable, and we commend it as one which a family physician may circulate with great advantage.

FOREIGN CORRESPONDENCE.

FRANCE.

ANNIVERSARY MEETING OF THE ACADEMY OF SCIENCES.

The Annual Meeting at the Institut took place last week, and, as usual, was attended by a crowd of distinguished men in every department of science. After the distribution of the prizes, M. Charles Dupin read an interesting notice on the London Exhibition, in which he endeavoured to show that nearly all the grand improvements in English industry were originally due to the genius of French inventors; and M. Flourens, the Secretary, pronounced a discourse in memory of M. Geoffrey-Saint-Hilaire.

The grand prize of experimental physiology was awarded to M. Charles Bernard for his memoir on "A New Function of the Liver." Last year, the same physiologist obtained the grand prize for his discovery of the function of the panereas; and the sanction now given by the Institut to his recent researches on a peculiar function of the liver, entitle us to assert, that his conclusions are not quite so erroneous as some critics in England and Germany are disposed to believe. The prineipal point on which M. Bernard dwelt in his memoir to the Academy was the one now familiar to all who have followed up this interesting question, viz., that the liver not only secretes bile, but produces a quantity of saccharine matter, which becomes mixed with the blood, and disappears almost completely during the act of respiration. M. Bernard fed a number of animals on meat preserved with alum,—a species of food which does not give rise to the production of sugar under the ordinary process of digestion. He found that the blood carried to the liver by the venæ portæ did not present a trace of sugar; while the blood flowing from the liver into the hepatic veins contained a very considerable quantity of that substance. M. Bernard also demonstrated, that the section of the pneumo-gastric nerves in the neck prevented the formation of sugar in the liver and hepatic vessels. Carrying his researches still further, M. Bernard appears to have been enabled to indicate the precise point of the central nervous system with which the saccharine function of the liver is connected. On destroying with a needle a very limited portion of the medulla oblongata, the secretion of sugar goes on uninterruptedly until the whole economy becomes saturated with it. M. Brown-Sequard obtained an "honourable mention" for his "Memoir on the Transmission of Sensitive Impressions along the Spinal Marrow."

PRESERVATION OF VEGETABLES.

M. Masson, head gardener to the Parisian Horticultural Society, was adjudged a prize of 2,000 francs for his ingenious method of preserving vegetables by desiccation. This may be considered as a question of public health, and therefore a legitimate subject for notice in your journal. The principle on which M. Masson pro-

ceeds is exceedingly simple, and easy of practice. He applies a moderate degree of heat,—just enough to dry the plant without coagulating its peculiar juices. Prepared in this way, the plant retains its special aroma and flavour for a considerable time, and, when immersed in water, becomes almost as good as fresh. One inconvenience, however, attended this method. The bulk of the plant remained considerable after desiccation, and too large a surface was exposed to the moisture of the air and other causes of alteration. This objection has been obviated by submitting the dried vegetables, etc., to strong pressure, which reduces them to cakes nearly as hard and heavy as wood. When intended for use, they are steeped in warm water, which they rapidly absorb, from forty-five to sixty minutes, and come out quite fresh. Experience has fully pronounced on the efficacy of this useful discovery. M. Masson's vegetable cakes have been found in excellent condition after a four years' voyage in the ships of war. Fresh vegetables are, perhaps, as essential to the health of sailors as fresh meat, and the Massonic cakes cannot fail to prove an agreeable, if not an essential, adjunct to the canisters of Goldner.

The prizes in medicine and surgery were chiefly awarded to the authors of works of more or less merit, though of no striking originality. M. Guerin, the proprietor of the *Gazette Médicale*, obtained 2,500 francs for his "Generalisation of Subcutaneous Tenotomy;" M. Duchêne, of Boulogne, 2,000 francs for his application of electricity to therapeutics; M. Garriel, 2,000 francs for his application of vulcanised India-rubber to medicine and surgery; MM. Tabarie and Pravoz, 2,000 francs each, for their works on the employment of compressed air; MM. Briquet and Mignot, 2,000 francs for their treatise on Cholera; M. Boinet, 1,000 francs for his treatise on the Use of Iodine Injections in Congestive Abscess, etc.

None of the works or discoveries just mentioned indicate any very great progress here in the healing art; but the awards must be taken as a measure of the progress, such as it is, and I have, therefore, thought them worthy of brief notice.

M. Sichel, the well-known German oculist, has received the cross of the Order of Charles III. from the Queen of Spain. The honour is a well-merited one. Some fifteen years ago, Sichel commenced his professional career by lecturing on diseases of the eye to English and American students, in a less than modest chamber in the Rue Hautfeuille. Since then his unwearying industry and talent have met their reward, and he now enjoys one of the first practices in Paris.

ARTIFICIAL DEFORMITY OF THE CRANIUM.

Certain barbarous nations, it is well known, are in the habit of producing in their children artificial deformity of the cranium, which they consider a beauty; but it will hardly be believed, that the same practice exists at almost a stone's throw from the gates of Paris. There is this difference, however, in the effects: the barbarians, if we can believe history, preserve their intellectual faculties uninjured by the artificial compression of the skull: while idiocy, imbecility, etc., are the universal effect of the practice in this country. We are indebted to Dr. Lunier, head physician to the Asylum at Niort, in the department of Sevres, for the curious fact now alluded to. The custom can only be attributed to profound ignorance, for we can hardly suppose it to be an imitation; yet the means employed are nearly the same as those had recourse to in South America. The head of the new-born infant is first bound firmly with a strong tight bandage; after four months, this is replaced by a pasteboard cap, firmly fixed round the head; and, at a later period, a strong iron wire is passed round the cranium, and twisted over the ear, to complete the compression. The effects of this barbarous practice are various, according to the degree of force employed. Generally speaking, the forehead is depressed, so as to resemble that of a monkey. In other cases the cranium is compressed laterally; in the most extreme degrees it is divided into two semi-globular sections, with a deep depression in the centre, produced by the action of the iron ring. The effects can be readily conceived. Of 38 females thus treated, or rather maltreated, in their infancy, 13 were idiots, 5 imbecil, 7 epileptic, 1 hysterical and weak minded, 2 paralytic, 3 maniacs, 3 affected with erotomania. Of 10 men, 1 was an idiot, 2 imbecil, 2 epileptic, and 5 maniac.

AN INVISIBLE ECLIPSE RENDERED SENSIBLE.

The applications of electricity and magnetism are infinite. They have already annihilated space, and may now be said to render visible things which are invisible. The experiments of M. Lion lead him to conclude that a solar eclipse exercises an evident influence on the movements of the magnetic needle, which it retards. Hence, he infers, that a solar eclipse may be followed in a place where it is not visible, and experience confirmed this idea on the 21st of January last. The oscillations of the needle were manifestly retarded by an eclipse of the sun, which was only visible in another part of the globe. There will be an opportunity of testing this curious fact on 17th June and 11th December next, when two eclipses occur which are not visible in our latitudes.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

ORIGIN OF PULMONARY EMPHYSEMA.

At the meeting of the Medico-Chirurgical Society, on Wednesday last, Dr. Seller read a very interesting paper on this subject, in which he endeavoured to show, that the production of pulmonary emphysema is explicable by the principles of pneumatics. The discussion which followed had mainly reference to the important inquiry, whether that peculiar morbid condition of the lungs resulted from the act of inspiration or of expiration. Dr. Allison confessed, that he had all along been of the opinion, that it was mainly due to the latter. The observation of the production of emphysema in the course of many cases of hooping-cough had almost satisfied him on that head. He had seen many emphysematous lungs in which there existed no other lesion. Dr. W. F. Gairdner referred to the views he had expressed in his recent Work on Bronchitis. He regarded the violent efforts at inspiration as the chief cause of emphysema. Since his attention had been directed to the subject, he had not failed to observe the relative existence of emphysema with a morbid condition of the lung, which might be found assuming one of three different forms, (as described in his papers,) and to which he had given the names of collapse and atrophy. Dr. Bennet had formerly given in his adherence to Dr. Gairdner's views, and he still agreed with him. The lesion Dr. Gairdner had described under the name of collapse might easily be overlooked, but he was satisfied of its very frequent existence, and, when carefully looked for, he had no doubt would be detected. Dr. Alexander Wood, and other members, took part in the discussion, Mr. George Glover saying what he could in favour of the physics of respiration.

DR. ESDAILE'S CHARGE AGAINST THE MEDICAL PRESS.

Dr. Esdaile, the introducer of mesmerism into the practice of medicine and surgery in India, has, within the last few days, published a pamphlet, affording a number of interesting details in connexion with his own experience on this subject. The pamphlet, he informs us in his preface, is a rejected contribution by the editors of our northern *Monthly;* the reason assigned for the rejection being, that, for a practical journal, Dr. Esdaile's article was not "sufficiently practical." In this opinion, the perusal of Dr. Esdaile's pamphlet leads us to concur. In regard to the charge brought against the Medical Press of this country by Dr. Esdaile in his preface, we can only say, that his remarks indicate a lamentable degree of ignorance. We assert, without fear of contradiction, that, at the present time, the Medical Press of this country is as free as it has ever been, or ought to be. No better proof of the truth of this exists, than the history of the investigation of the phenomena of mesmerism. The adverse opinions of the medical journals having uniformly been expressed only after careful consideration of the subject, and after the frequent immoral and at all times morbid natures of the mesmeric phenomena had been detected and exposed. We do not regard it as a subject admitting of speculation, whether, if the anæsthetic properties of ether and chloroform had not been known, we should in this country now employ mesmerism. For our own part, we are perfectly satisfied that we should not; for the so-called phenomena of mesmerism are only capable of being excited or induced in certain rare morbid conditions, and its use in surgery could at the best have been only exceptional.

LOOK AT HOME.

The articles in the *Medical Times and Gazette* under this head interest the Profession here, as indeed everywhere, and are, we conceive, capable of doing much good. It is possible that a species of quackery, somewhat prevalent in the north, exists in the south, and may in turn pass under animadversion; but, at all events, we shall do no harm in directing attention to it. A medical man, looking forward to a change—of course, for the better—in his place of residence, takes the opportunity of advertising himself by affixing to his door, or near it, a board of goodly dimensions, on which is painted, in characters which he who runs may read,—"Dr. Dash, removing from Old-street to New-street." This is a species of quack advertisement, of which the members of no other pro-

fession are guilty. It is a totally different thing when a medical man, after his removal to another house, intimates the same by an *affiche* at his former residence. The one is necessary and commendable; the other quackish and contemptible.

DEATH OF DR. SPITTAL.

Dr. Spittal the well-known author of a work on Auscultation and of several important papers, chiefly relating to physical diagnosis, died at his house in London-street, on the 7th inst., at the age of 48. For some time Dr. Spittal had been in indifferent health, but it was only during the last three months that he was entirely disabled. His death resulted from extensive disease of the aorta, with dilatation of the heart and affection of the kidney. Dr. Spittal was early distinguished as a most successful cultivator of physical diagnosis, his early studies of which were prosecuted as physician's clerk in the Royal Infirmary. To that Institution he was afterwards for some years physician; to the circumstances which led him to resign this office we may hereafter allude. He was also Fellow and Member of the Council of the Royal College of Physicians. Dr. Spittal was an amiable man, an accomplished physician, a kind-hearted friend. His loss will be much felt. He was the son of the late Sir James Spittal, at one time Lord Provost of Edinburgh.

LOSS OF THE BIRKENHEAD.

Though his name is not recorded in the list of the drowned, there has in all probability perished, in the wreck of this ill-fated vessel, Dr. John Robertson, staff-assistant-surgeon, a young medical officer of uncommon excellence and promise. Dr. Robertson, after a brilliant career as a student, graduated in Edinburgh in 1847, and, in the same year, on the recommendation of the Edinburgh College of Surgeons, received the appointment of assistant-surgeon in the army; implying, that after a most searching professional examination, he was found to be the most accomplished of the licentiates of that year. Dr. Robertson served on the staff at Dublin, Ithaca and Cephalonia, and Chatham. In the latter town, he had for a considerable period the charge of the museum connected with the hospital, and was studiously employed in the prosecution of pathological anatomy. In all his various situations, his duties were uniformly performed with scrupulous fidelity, and with the most unwearying perseverance. His untimely end has produced a most melancholy impression. Appalling as was the catastrophe in which he perished, his loss brings grief and unavailing sorrow more directly home to many of us—for recently he was among us, full of life and hope. He has perished with many brave hearts; and, sad as is the lot of their bereaved friends, they have this consolation, that just as truly as if engaged on the field of battle, they have suffered and died for their country; and

"Dulce et decorum est pro patria mori."

GENERAL CORRESPONDENCE.

PURULENT INFECTION OF THE BLOOD.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the *Edinburgh Monthly Journal* for the present month, Professor Bennett concludes a series of most interesting papers on leucocythemia, and reviews the different theories relative to the formation of scattered abscesses in internal parts.

In the course of his remarks, Professor Bennett observes, "the doctrine advanced by Mr. Henry Lee resulted from observing that when pus was mingled with recently drawn blood, it coagulated more rapidly and more firmly than under other circumstances. This observation he connected with the well-known fact, that phlebitis was often associated with coagula causing obstruction of the veins."....But "it does not follow, that because dead pus is mingled with recently drawn blood about to coagulate, that therefore it should induce coagulation of *living* blood in the vessels of an animal. Hence, although the fact to a certain extent must be admitted, that when pus is mingled with blood the coagulum formed is more firm, it by no means follows that it produces coagulation of living blood."

Professor Bennett argues very correctly from the premises which he assumes; but his data are derived, as I have reason to believe, from a repetition of *some* of my experiments by Mr. Millington. Had he consulted my own account (a) of the facts from which the conclusions were derived, he would have found, however deficient in other respects my treatise may be, that the link in the chain of reasoning which he supposes to be deficient had been most carefully supplied.

(a) On Phlebitis. London: 1850.

Mr. Millington, to whom my best acknowledgments are due for the candour with which he has referred to my observations, laid an account of some similar experiments before the Physiological Society of Edinburgh in November 1851.

"The formation of numerous small abscesses in the viscera," observes Mr. Millington, "especially in the lungs and liver, and the dangerous constitutional symptoms that accompany them, have of late been pretty generally referred to the entrance of purulent matter into the blood. But the manner in which pus acts in these cases has been much disputed. The numerous disseminated abscesses of the viscera have been usually explained by the mechanical arrest of pus globules in the capillaries of these organs. This opinion is based on the well-known physiological fact, that foreign substances entering the blood, and, failing to be discharged by the national emunctories of the body, collect as on a filter in the capillaries of the lungs or liver, and give rise to inflammation there for their elimination. This view was thought to be established by the experiments of Cruveilhier, who introduced metallic mercury into the veins of living animals with the effect of producing in the lungs or liver numerous small abscesses, each containing a small globule of mercury, according as the metal was introduced into the general or portal circulation. Mr. Lee, of London, was the first to call in question this mechanical explanation of the *modus operandi* of pus; and he has the merit of first demonstrating, by actual experiment, that when pus is added to living blood it causes its speedy coagulation."

In repeating the experiments upon this point, Mr. Millington collected six ounces of blood from the jugular vein of a living animal in a vessel containing half an ounce of fresh pus; the same quantity of blood was received into a vessel containing half an ounce of moderately putrid animal fluid; a similar amount of blood was received into a third vessel containing half an ounce of bile. "The contents of the vessels were now gently stirred with glass rods, and the changes observed in the blood were carefully noted. That to which the pus had been added began to coagulate almost immediately, in a manner which is quite peculiar, and which I have had repeated opportunity of witnessing. Its colour also underwent a change, becoming slightly darker. The blood to which the putrid fluid had been added became immediately very dark, but did not begin to coagulate until after the lapse of some minutes. The blood which had been mixed with the bile was quickly changed to a brownish-black colour, but it evinced little tendency to coagulate, though it remained for hours undisturbed."

These experiments of Mr. Millington fully confirm my own observations, as far as the peculiar action of pus upon blood is concerned, when withdrawn from the body; and, if taken alone, would by no means prove that any similar effects were produced in the living vessels. The following experiments, however, I take to be conclusive upon this point, and I beg to record them at length, in order that, as they entail some amount of suffering, they may not needlessly be repeated.

Experiment 1.—Three drachms of pus, in no degree putrid, having been previously warmed, were injected, by means of a glass syringe, into the brachial vein of an ass. During the operation the vein became thickened, and, in a very short time afterwards, it could be felt as a hard, unyielding cord, as high as it could be traced with the hand.

Experiment 2.—An ounce of perfectly pure pus, previously warmed, was injected into the right jugular vein of an ass. The vein immediately became "corded," and the blood appeared to have coagulated in the vessel.

Experiment 3.—Two ounces of putrid pus were injected into the left jugular vein of an ass. The vein during the operation afforded an elastic feeling of distension, as though the blood were in a semi-coagulated state.

Experiment 4.—Two fluid ounces of perfectly pure pus were injected into the right jugular vein of an ass. The vein became tense during the operation, and it was found difficult, by mechanical means, to propel its contents towards the heart. Forcible pressure was insufficient to overcome the resistance. Upon a *post mortem* examination eleven days afterwards, an abscess was found in the course of the vein. For several inches, both above and below, the vein was filled with coagula, which effectually obliterated it. In these cases it will, I think, scarcely be denied, that the thickening felt in the veins during the experiments, depended upon the coagulation of the blood; and I trust that Dr. Bennett will, upon consideration, be prepared to admit, that the vital sensibility of the blood, as illustrated in its power of localising the action of some morbid poisons, is evinced, as might *à priori* have been anticipated, even in a greater degree within the living vessels than out of the body.

I am, &c.

13, Dover-street, Piccadilly. Henry Lee.

BITTER BEER.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your Number of the 3rd instant you are pleased to express your approbation of the letters from Mr. Ind and myself, which have been followed by one equally explicit from Mr. Allsopp, "denying in indignant terms the alleged falsification of bitter beer with strychnine;" but you add, "it is the middlemen who are the guilty parties, if any be guilty." I apprehend that the drinkers of bitter beer would not give one farthing for choice whether they are to be poisoned by the brewers or the "middlemen," and that this last suggestion is scarcely less mischievous than the original insinuation. Like many other allegations, however groundless and unreasonable, it may be difficult to demonstrate its absolute impossibility; yet I am perfectly persuaded the public will not yield to suspicions so improbable, and resting on no tangible foundation.

You suggest, that the "middlemen" may, by adulteration, make one bottle of stale beer into two. How can that be accomplished? Certainly not with strychnine, which would be a substitute for the hop only, according to your theory; what is to represent the malt? But permit me to assure you, that the idea of making pale ale of presentable appearance and flavour by means of stale beer is preposterous,—the characteristics of tolerably good pale ale absolutely forbid it; it must be pale and quite brilliant in colour, and of pure and delicate flavour: how can such a metamorphosis be made from stale beer? I aver that there is no brewer of experience, whether ale or porter brewer, who will venture to deny, that pale ale is of all malt liquor the most difficult to adulterate. I believe it to be quite impossible, preserving at the same time the ordinary features of pale ale, to adulterate it.

In your original article on this subject, on the 20th of March, you state, that the strychnine manufactured in Paris was "discovered to be intended for exportation to England in order to fabricate bitter beer." How was it so discovered? What proof have you offered to the public of the truth of so astounding an assertion? Have you, as has been done in the case of many suspected articles, caused analyses to be made of bitter beer? Have you even made any inquiries as to its adulteration? Have you thought it incumbent upon you to ascertain by any investigation the destination of the strychnine imported into this country? Then, if you have not traced the employment of strychnine in "bitter beer," why should you fix your aspersions upon that article?—why not on other beer, on ale, on porter? Are the "middlemen," as you call them, who sell those beers, supposing it possible there should be one single retailer so profoundly vile as to justify your suspicions,—are they to confine their poison to bitter beer and leave the competing articles untouched? Where are your dead men—the victims of the wholesale slaughter your ingenuity has conceived?

I am assured by sensible men, or I would not have believed it, that there may be some people so nervous, or so unreasonable, as to attach importance to this "fable." I regard it as one of the most unjustifiable attacks on the interests of an important trade that ever appeared in print. But on the part of the entire trade, brewers, and "middlemen" too, I undertake to offer every possible facility for testing the truth or falsehood of the allegations you have published to the world. I am, &c.

M. T. BASS.

[Mr. Bass is as bitter as his own beer, and, like most men in a passion, has written a letter which can do him no service. Mr. Bass professes to have read our original article on this subject, and yet he puts several questions to us, with the answers to which he should be well acquainted. We will, however, answer the questions once more. The author of the statement, that strychnine has been made in Paris, and exported to England to give bitterness to beer, is M. Payen, who has delivered a course of lectures on public hygiene in Paris, which, we understand, has been reported in the *Constitutionnel*. The paragraph relating to this falsification was inserted in a well-known medical periodical, *L'Union Médicale*, of the 6th of March. In our usual reading of the foreign journals, we met with this statement, and it appeared to us to be of the greatest importance. We had not then, and we have not now, any reason to believe that this deliberate statement of M. Payen was a "fable." We gave it publicity because it was our duty to do so, and, until the Government have examined into the matter, we shall not let it drop. If we find a statement in a respectable journal which concerns the health of thousands of our countrymen, it is our business to make it known; but it is not our business to analyse beer. It is not our business, but that of the Government, to ascertain the destination of the strychnine which is imported into England. Mr. Bass appears to have most indefinite notions of the duties of the public press, when he puts such questions to us. We must, also, say, that Mr. Bass has written his letter very disingenuously, when he leaves it to be inferred, that we made this statement without authority. On the contrary, in our first article, which he has read, we gave most explicitly the source from whence we derived the information. With regard to one of Mr. Bass's remarks, we must state, that we never understood M. Payen's assertion to refer only to the beverage called by the trade "pale ale," but to all sorts of bitter beer. If Mr. Bass wishes this question sifted to the bottom, and we do not hesitate in believing that he does so, let him call with us on the Government to cause inquiries to be made of the French Government as to M. Payen's assertion, to learn what quantity of strychnine was manufactured, when and by what channels it was imported into England, and what led the French police (for we presume M. Payen derived his information from them) to suppose that it was intended for the adulteration of beer. The result of these inquiries may satisfy the public, but it can never content any one to have a deliberate statement met simply by a brewer's assertion, that it is a "fable." For ourselves we disregard the offensive tone of Mr. Bass's letter. We only advise him, if he writes to us again, to show his letter to some judicious friend.—ED. *Medical Times and Gazette.*]

A FEW PRACTICAL OBSERVATIONS UPON ABORTIONS, ELICITED BY THE REPORTED CASE OF DR. FOLEY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Perhaps you will deem the accompanying communication worthy of a place in your next Number. I am, &c.,

70, Mornington-road. W. PRETTY.

In the *Medical Times and Gazette* of Jan. 31st, there appears a remarkable case of gestation, as reported by Dr. Foley, the reading of which induced immediately in my mind strong suspicion that there was some mistake, and that an explanation might be given of what the Doctor observed which would remove all the anomaly and supposed peculiarities of that case. As Dr. Foley has invited the attention and the remarks of his professional brethren, he will feel no surprise or displeasure if they should not happen quite to coincide with his own opinions. In the *Medical Times and Gazette* of March 6, a communication appears with the initials "B. L.," in which an explanation is given quite in accordance with my previously-formed opinion, and which I think carries with it much probability. Although I am not quite prepared to say that the solid fleshy organised mass parted with in this case did not come from the uterus, there are grounds upon which we may entertain just doubts of its formation within the uterus, and its expulsion therefrom. I doubt its being a blighted ovum. A coagulum having a fleshy appearance is often discharged after the occurrence of uterine hæmorrhage, as clots are after many ordinary labours. In all cases of abortion which have occurred in my practice, I have taken some trouble to examine all the clots that I could obtain, and I do not recollect an instance in which I did not find satisfactory evidence of a blighted ovum, or one not blighted having been discharged when abortions had really taken place. In early abortions, the ova are commonly, though not always, so entangled in coagula, that, without close attention and examination, they may escape detection, as in cases of what I believe Dr. Murphy calls apoplexy of the ovum. But I generally find a pellucid membranous sac, with a coagulum, sometimes containing a funis and embryotic rudiments, and sometimes not. Why the latter should not always be present is not easily to be accounted for. In some cases the ovum may have been broken up, more or less, in its passage from the uterus or from the nurse or mother's inattention, and so lost; or I may ask if this membranous sac be not decidua uteri, and the ovule have perished before it reached the uterus. Agreeably to Dr. Ramsbotham's explanation of the theory of the final cause of menstruation, the discharged ovum is often coated in part with mucus, and in shape occasionally resembles the interior or cavity of the uterus. I have never seen the discharge of this peculiar delicate membrane in any but married women who believed that they had conceived, and had passed

over at least one period without the catamenia appearing. Now, in Dr. Foley's case, the mass was cut into, but nothing membranous, no vestiges of a fœtus, or anything bearing a resemblance to placental structure, were seen, and "the lady was assured that she had not lost a child in that." I know that my objections may be replied to by saying, that it is almost impossible to determine what changes may take place in the structure of the ovum in utero from imperfect or morbid action of some kind going on during gestation. My limited practice has afforded me no instances beyond what I have mentioned, and what I shall probably illustrate by a few cases in another Number of the *Medical Times and Gazette*. I have seen not a few abortions of blighted ova, and non-blighted ova; but I have in vain looked for a mole or a fleshy mass of any kind, as the result of conception, which was without its own certain evidence.

The child was weakly and small; this might be, and probably was, the effect of so severe a loss of blood, though it does not always happen so. The weight of the child, and also that of the placenta, would have improved our knowledge of its size, with perhaps some other particulars. The placenta, if at all diseased or abnormal, would most probably have been noticed.

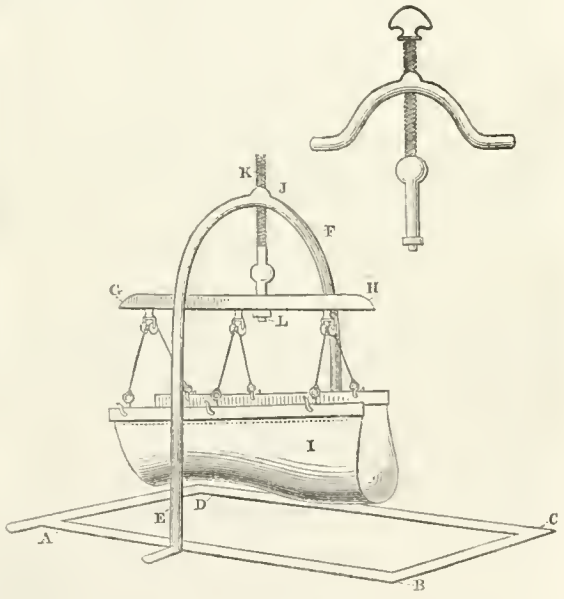
I will just add to this communication some few particulars of a case of abortion in which the fœtus was discharged in a state of putrefaction; and in my next, a case in which putrefaction did not ensue upon the death of the fœtus, though retained in utero for several months afterwards. A lady of rather delicate health, and predisposed to phthisis, that I had attended in all her confinements, and was then the mother of five living children, became again pregnant, and in March, 1841, I was sent for. My patient informed me, that full seven months previously she had conceived, and experienced her usual symptoms, as sickness, etc. She fancied that at four months she quickened, but could not speak positively about it. For a period of three months, from about the third month of gestation, she had upon her a draining, sometimes present for one day only, at other times for a whole week, and even a fortnight, with a small amount of pain in the lumbar region and in the uterus. Ten days before my visit on March 22, after having been free of all appearances for several weeks, she suddenly lost half a pint of blood, with but little more pain than she had hitherto experienced. I could not discover satisfactorily that there was any enlargement of the uterus by an external examination; an internal one did not give me much more information. I did, however, find that the os uteri was sufficiently open to admit the point of the finger, and I judged that something, probably a blighted conception, would be thrown off. A few hours after, in my absence, she parted with a fœtus, far advanced in a state of putrefaction; it was two inches long, and about the width of my finger, which is not over large; it was of brown and black colour, with a very fetid odour. No appearance of placenta and membranes was observed by those who reserved the fœtus, and none was shown to me. From what followed it is very probable that the placenta had undergone like decomposition with the fœtus, and constituted much of the thick, offensive discharge which ensued. More than her usual amount of pain after delivery, and that for a longer time, was felt by my patient, with tenderness over the lower part of the abdomen, and a feverish, wakeful state. This state induced me, on the third day, to make an examination *per vaginam*. But there was nothing for me to remove; the os uteri was nearly closed, and the vagina was empty; my finger was withdrawn smeared over with a dark offensive discharge. This discharge gradually became thinner and less offensive, the constitutional disturbance subsided, and the pain nearly left her; so that at about the twelfth day she was pretty free of all complaint, though she continued weakly for some time afterwards, and said that there remained some uneasiness in the rectum and womb. Mrs. W. is now in her usual rather delicate state of health, and I have not heard of her having again become pregnant. This conception must have been blighted before the third month, though not parted with till after the seventh month; both placenta and fœtus must have been in a state of decomposition at the same time, though it is not improbable that the placenta was first affected, be the cause whatever it might.

NEW BALL AND SOCKET SWING FOR FRACTURES OF THE LEG.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having found the accompanying apparatus of great use in a case of compound comminuted fracture of the leg, occurring in a lady 76 years of age; and, having carefully observed its working day by day, I am induced by the happy results which have attended its use, to enclose you a rough sketch of it, in the hope that you will be able to give it a place in your Journal, and in full confidence that its employment will save considerable suffering on the part of patients, as well as afford much satisfaction to the surgeon who uses it.

Having long been struck with the unwieldy character of the common fracture-box, I had, in some instances, successfully employed the swing used and invented by Mr. Luke, at the London Hospital; but upon being called to my late patient, I at once felt that the latter was not all I required for her successful treatment. A brief outline of the case possibly will best show my meaning. Being sent for, I found a lady 76 years of age, who had, from a fall down stairs, suffered a compound and comminuted fracture of the fibula, with simple fracture of the tibia, at about the juncture of the middle and lower thirds. I removed three portions of the fibula, and endeavoured to place the limb on the side, but was informed that the patient was unable to lie in the necessary position, that she habitually could not remain more than ten minutes in one posture, and was of a highly nervous temperament; for these and other reasons, which I need not trouble you with, I felt that to save the limb, and probably the life, of the patient, she must be allowed free movement in the bed, and endeavoured to provide an apparatus which would answer this purpose. After some alterations, I constructed one, the accompanying sketch of which will be sufficient to render its principles clear to your readers. The chief objects I aimed at, were perfect freedom of motion and simplicity, with cleanliness and economy. I may at once add, that my case has became convalescent without a bad symptom. More than one practitioner has been baffled in finding the point of fracture. She has suffered more pain from a slight rheumatic affection of the sound limb than she has in the broken one, and has the most perfect confidence in the swing. It consists of a light iron frame with a central fixed arch, wooden beam, carrying three brass pulleys, and hammock.



The iron frame *Fig.* 1, A B C D and the arch E F are formed of light oval iron, about three-quarters of an inch broad; in the centre of the latter, on the upper surface, is a socket having a brass ball (J) fitted into it; through this ball is a hole, which receives the upper end of the centre pin K L, and which is made with a male screw at each extremity, the upper one extending to within one inch of its centre, the lower one having but a few turns of worm; it is beaten out flat in the centre, to afford a hold when the nuts are being screwed, and which otherwise might rotate the pin, instead of moving along the worm. The beam G H is made of any tough wood; it carries three brass pulleys, one in the centre, and one near each end—they are placed so as to play laterally; the beam is also pierced with two holes, one at an inch from the centre, and the other at one inch and three-quarters; these admit the centre pin, and one is to be selected, according to the length and proportions of the limb; in the ordinary case of a well-formed limb the pin should pass through that furthest from the centre. The proof of the right hole having been selected being, that the limb hangs horizontally without any effort on the part of the patient. If the leg is suspended from a point at or too near the centre, there

is a tendency for the foot end of the swing to rise, from the greater weight of the upper part of the leg. The hammock I is formed, for common use, of unbleached sheeting; but a much more comfortable one is made of coarse knitted cotton, this, being elastic, affords a perfectly equal pressure to the entire limb. At the sides of the hammock is a hem, which receives a narrow piece of thin brass having three holes near one edge, into which the hooks at the end of the whipcord are placed. The mode of application is simple, and as follows:—The limb having been placed in splints as usual, is gently raised, and the hammock, with the hooks of one side attached, is placed under it; the three opposite hooks are then put into the other side of the hammock, and the limb is raised by means of the left hand placed in the centre of the beam. The lower nut having been removed from the centre pin, the frame is now placed in the position it is to occupy, the pin passed through the beam, and the nut replaced; the height of the limb is then to be regulated by means of the upper nut, according to the comfort of the patient. It will be ascertained when the frame is in its right place, by observing if the centre pin and whipcords, when at rest, hang perpendicular. Finally, a small pillow is to be placed under the lower part of the thigh and knee, so as to press gently against it; this is not indispensable, though it adds greatly to the comfort of the patient. If the case be a compound fracture, it is advisable so to place the limb that there is less hammock on the side of the wound than on the opposite, thus rendering the application of poultices, etc., more convenient.

Should the limb move in the lateral direction too freely, which rarely occurs, a small pillow is to be placed beneath the hammock, so as to press gently against it; this will restrain the movement without jerking or impeding it,—in fact, it acts as a break upon a wheel.

If the patient should slip down in the bed, the entire swing must, of course, be also brought down; but this can be done by any attendant, as the patient does not feel the movement.

In thus calling attention to a new apparatus for the treatment of fractures of the leg, I do not put forward the slightest claim for originality relative to the principle of suspension. This was conceived and practised many years since; but, as far as I am able to judge, has never been fully carried out except through the medium of an apparatus too complicated for general use.

I have always felt that if the swing is ever to supersede the fixed support in the treatment of fractures of the leg, that it could only be through the medium of an apparatus which would allow unlimited and easy movement in every direction, while it also possessed the properties of simplicity and economy of construction. But it will be well briefly to consider what are the advantages which the swing possesses over the fixed support.

1st. As to the limb, it should afford greater ease, and yield a more general support, without pressing on any one particular point, promote the circulation of the blood, be cooler, more cleanly, easy and simple in construction and management, admit the use of thinner and less cumbersome splints than the ordinary wooden ones, and allow of all splints being sooner discarded; it ought to render less bandage necessary, thus allowing a more perfect view of the limb; and, lastly, it should remove the necessity of altering the bandages, and therefore of handling the limb.

2nd. As to the general advantages and comfort of the patient, it should permit of free movement on his part in the bed, without danger of altering the relative position of the fractured extremities of bone.

The combination of these several points should render the treatment generally more simple; it ought to be the means of promoting the more rapid union of fractures, of yielding a larger proportion of perfect limbs; and, lastly, of diminishing the number of amputations.

True it is, that several of the swings now in use fully answer several of the above-mentioned points, and are therefore much to be preferred to any fixed apparatus.

It is, however, the combination of the whole which proves of the greatest value, and at which I have aimed in constructing the ball and socket swing: it remains for the Profession to decide whether successfully or not.

Feeling as I have, for some time past, that the swing will, in the majority of instances, ultimately take the place of the fixed support, and would have done so ere this had any been proposed which possessed the necessary good qualities, I sincerely trust that the principle and apparatus which I now advocate will be found to meet the necessities of the case, though I shall be happy if others will improve upon them.

It would be easy to dilate upon the advantages of the swing principle as compared with the fixed rest, of whatever kind it may; for the question involves the entire principle of treatment in the most common fracture to which the human frame is subject; but I feel, that to mention them thus briefly will be sufficient to make your readers reflect upon the subject. If I accomplish this I shall be satisfied.

It has been suggested to me, by Mr. Luke, that it would render the apparatus more portable if made so as to take to pieces; and, acting upon this advice, I have ordered one, which I am told by the maker (Mr. Biggs, of St. Thomas-street, Borough), will go into a box, measuring about 22 inches in length, 6 in width, and 3 in depth.

The dimensions of the apparatus are as follow:—Breadth of frame, 12 inches; length of ditto, 21 inches; height of arch, 16 inches; length of screw-pin, 6 inches; length of cords, 8 inches.

I am, &c. ALFRED ROBERTS.

Rye, Sussex.

THE UTERINE SOUND.

[To the Editor of the Medical Times and Gazette.]

SIR,—In a late Number of your Journal, "M.D." Lond., states, that I have "pointed out a serious typographical error in" his "letter inserted in your Journal for February 21." The bulb of the uterine sound is stated to be "half an inch in diameter; it ought to be, half an inch in circumference." Now, Sir, the words formerly employed by "M.D." were,—"But the new point worthy of note is, the uterine sound passed more than two and a half inches." To have passed so far, it must have penetrated the os uteri internum, and, as it is surmounted by a bulb which measures from a quarter to half an inch in diameter, this bulb must have passed through the orifices of the uterus. Now, in the healthy condition, these orifices are not so large as to admit an instrument of this size to pass, and hence, according to Dr. Rigby's Report, "those parts were morbidly enlarged, not contracted." Surely, if there was simply a typographical error here, it must in all honesty be admitted to belong to "M.D.'s" first measurement as well as to his last; and then the sentence would read, "a bulb which measures from a quarter to half an inch in circumference," etc. This would give a diameter varying from one to two lines (there being twelve duodecimal lines to an inch). Now, does "M.D." mean to say that, in the normal condition, the orifices of the uterus do not measure even one line in diameter? Or does he mean that, by his former communication, we are to understand that the bulb of the uterine sound "measures from a quarter of an inch in diameter to half an inch in circumference?" or, in short, what does he wish us to comprehend? I fear there is something more than a typographical error here!

I trust I am mistaken in thinking, that in M. D. Londin. I recognise one who for a long time has been in the habit of attacking his Professional brethren under fictitious names. At any rate, I cannot condescend to discuss medical questions with him, whoever he may be, so long as he attempts to hide himself behind an anonymous signature. Until he adopts a more manly course, one more consonant with a simple desire for truth, I am contented to leave to him, as well as to his "accomplished" obstetric friends, who did not distinguish between a pregnancy in the ninth month and a pendulous tumour of the uterus, all the benefit they can obtain from his advocacy or from his last disingenuous and unlucky production. I am, &c.

Birkenhead, Cheshire. CHARLES HAYES HIGGINS.

TRANSPORTATION OF AN APOTHECARY.

(Abstracted from the *West Briton and Cornwall Advertiser*, April 2.)

CORNWALL SPRING ASSIZES.

WILLIAM HAMLYN PASCOE, a surgeon, aged 50, was indicted for feloniously administering to Catherine Nicholls, on the 11th of July, a certain noxious drug, called savine, with intent to procure miscarriage.

Mr. Stock conducted the prosecution, and Mr. Rogers the defence.

Mr. Stock stated, that Catherine Nicholls is the daughter of a saddler residing at Probus, and that the prisoner lived in the village of Cubert. Catherine Nicholls, in consequence of illness, could not attend, but her deposition before the magistrates would be put in as evidence. He said the prisoner gave her a mixture first on the 8th of July, which was not calculated to produce abortion, though many persons, and even some medical men of not much knowledge, conceived it was calculated to produce that effect. But as to the prescription the prisoner gave Miss Nicholls at his second

visit, on the 11th July, he believed there could be no doubt that it was intended to procure abortion. And there was this remarkable fact, that the names of the patient and of the medical man were omitted from this second prescription, no doubt with a view to secresy. That Catherine Nicholls was a consenting party in the case, was of no consequence; all that the jury had to be satisfied of was, that a certain noxious drug had been administered; and, secondly, that it was administered with intent to produce miscarriage.

Mr. Stock then called the following witnesses.—

Catherine Hockin: I live at Newquay, and know Catherine Nicholls, who lives at Probus, about fourteen miles from Newquay. In the beginning of last June, Catherine Nicholls came to lodge at my house at Newquay; she remained in my house five weeks and two days. The last week she lodged in my house, early in July, she was visited by Mr. Pascoe. I do not know whether she sent for him or not. She complained to him of palpitation of the heart and liver complaint. Mr. Pascoe sounded her, and said her heart beat very strong. She said she was not well, and had been in that state for three months; it was a periodical illness. He examined her breast. He then asked if he should speak to her, and was alone with her two minutes. He afterwards wrote a prescription for her, and took it with him. On the following day (Wednesday) medicine was sent to her. I had no suspicion before of Miss Nicholls, but seeing him examine her breast, I asked him when he came again on Friday, whether he had any suspicion of Miss Nicholls being in the family way. He either said, "Not at all," or "I don't know." This was before Miss Nicholls came into the room; she then came in, and, my child being troublesome, I left. They were together about a quarter of an hour. I afterwards supplied him with pen, ink, and paper, and he wrote a prescription; and my husband took it to Mr. Michell's, druggist, at Newquay. The medicine was bought for her on Saturday morning about eleven o'clock. I did not see her take any of it, but she took out the cork, and I perceived the smell. She left my house the next day (Sunday); it was Probus feast, and her father came and fetched her.

On cross-examination witness said, she only saw Miss Nicholls opening the front of her dress; she did not know whether Mr. Pascoe saw her breast.

George Hockin, husband of last witness, recollected the first time Mr. Pascoe came to his house. Miss Nicholls afterwards gave witness a prescription, and he took it to Mr. Michell's, a druggist, at Newquay.

The chemist was then called to prove the nature of the two prescriptions. The first was mistura ferri comp.; the second was oil of savine ℥iv., friar's balsam ℥vj.=12 drops three times daily in water. In order to preserve the continuity of the case, we next extract the deposition of Catherine Nicholls, who was too ill to appear in Court.

Catherine Nicholls stated: I was at Newquay in lodgings about six weeks ago; I was unwell, and consulted Mr. Pascoe as my medical man. He came to see me at my lodgings at Mrs. Hockin's. I told him I had a complaint of the heart and liver. He examined my heart and gave me a prescription. I did not see him write it out, but he said he would send me medicine. I received a bottle of medicine from Mr. Michell's, the druggist at Newquay, next morning. I took the greater part of it, and left the rest at my lodgings. Mr. Pascoe visited me again a few days after; I had taken the most of the medicine by that time. The second time he came he examined me again; he examined my heart, and wrote out another prescription for me, and desired me to take it to Mr. Michell, the druggist. I sent it by George Hockin, and received the medicine next morning. I don't know exactly when it was. I took all the second bottle of medicine. I left Newquay and took the second drops at home; I took twelve drops three times a day; I took it in water; it was of a darkish colour, and smelling rather strong, but did not taste strong. After taking the medicine, I thought I was better. That bottle lasted me some time; I took it regularly every day, and when it was finished I went again to see Mr. Pascoe. He gave me some pills, and I went home again and took them all. After that I went again to Mr. Pascoe, and went out there to stay; I left there on Thursday week, (the deposition was dated the 30th of August, 1851,) having stayed there from the Tuesday week before. While staying at Mr. Pascoe's house, he gave me no other medicine than salts; and he examined me several times. [The above was the material part of the deposition.] When before the magistrates the witness was asked questions by Mr. Pascoe; and in reply to one of these she said, "I never told Mr. Pascoe that anything more was the matter with me than disease of the heart and liver."

William Eastlake: I am sexton of Cubert parish, and know Mr. Pascoe. He gave me orders to come to his house; I did so, and saw him. There was a little parcel handed over to me, it being then about nine o'clock in the evening. Mr. Pascoe handed the parcel to me, and ordered me to take it to the churchyard and bury it. I did not see what was inside of it; outside there was a handkerchief. I buried it on the south side of the church, dug a hole, and covered it over. This might have been a few days before the coroner's inquest, as well as I can recollect.

Cross-examined: I had not been in the habit of burying similar parcels.

Mary Scoble, of Cubert, said: The coroner's inquest was held on a Tuesday. On the Saturday before, I saw Eastlake at Mr. Pascoe's door with something under his coat, and afterwards saw him on the churchyard stile. Next day (Sunday) I was in the churchyard; and, seeing a turf cut on the south side of the church, I took it up, and found a bundle underneath containing some heavy substance. I went for another woman, Betsy Glasson, who came and opened the bundle; it contained a female child, apparently not a full-grown child.

Cross-examined: I never saw a prematurely born child before this. When I saw Eastlake on the churchyard stile, it was a very good light, and I gave him the time of the night; he did not seem to try to escape observation.

Henry Coombe: I am constable of St. Columb Major, about eleven miles from Cubert. I took Mr. Pascoe into custody on the 29th of August, and read the warrant to him, which contained a charge of administering drugs to procure miscarriage. After hearing the warrant, Mr. Pascoe said: I will explain to the gentlemen all about it when I come before them. He said, as to the child, I do not know whether it was a boy or a girl; I did not examine it, neither was I present when it was born. The child was given to the sexton in the general way, and as for the medicines, I never procured any, for I am only a consulting surgeon; Miss Nicholls had her medicines of Michell, a chemist of Newquay, where you can get my prescriptions. The only thing that would criminate me is, that I did not make it publicly known. I told Billy Eastlake he was to come and take it away, and get it interred, but I did not know whether it was a boy or a girl; and the reason, he said, he did not make it publicly known was because he did not like to throw any slander on the girl, but rather than get himself into trouble he would divulge the whole.

William Moorman: I am a surgeon in practice at St. Columb Major, and have been practising for more than twenty-one years. The prescription produced (No. 174) consists of eight ounces of compound iron mixture, one large spoonful to be repeated twice a day. That is applicable to some affections of the heart, and to some conditions of the female system where certain conditions are suspended, and as a tonic in other cases. Given in large doses, it would not, in my opinion, be injurious in cases of pregnancy. It is not a medicine calculated to procure abortion or miscarriage. Some ignorant people have believed it can produce that effect, and some medical men have even supposed it, but in my opinion it would produce no such effect. The other prescription, (No. 179,) consisting of oil of savine and friar's balsam, would not be fitted for a disease of the heart or liver. It has been used for diseases of the womb in old practice. It is not used now, but is generally discountenanced by the Profession, on account of its being a very severe and dangerous irritant, as being a very severe medicine and purgative. It is popularly known as a means for producing miscarriage. The three doses a day (36 drops) would convey about fourteen drops of oil of savine, and used in that quantity I am of opinion this medicine would produce the peculiar effects of savine, such as irritation or purging, or inflammation probably of the large intestines, and, as a consequence of that, miscarriage might take place.

By the Judge: In your judgment, would a man of competent knowledge prescribe that in such quantities, except for abortion? Witness: I think a man of competent knowledge would not.

Mr. Stock: Looking at the nature of the thing and the quantity, is it such as a man ought to prescribe for any proper purpose? Witness: I think not, medically, or for any legitimate purpose.

The Judge: Then, in your opinion, such quantities would indicate want of skill in the medical man who prescribed, unless his purpose was abortion? It would my Lord, unless the object was abortion.

Examination continued: Death has occurred from the use of savine, but I do not think, given in this quantity for a short time, it would produce death. Salts taken in conjunction with it would tend to keep up the irritation, and make miscarriage more probable. On the prescription, No. 179, there is no name of the patient or medical man. On prescription No. 174 it is written, for M. Nicholls, but it is not signed, as is usually done, by a medical man. I very seldom write prescriptions in a chemist's shop; if I did so I might not write my initials to it; but if I

write a prescription in my own house, I should put my name and the name of the patient; that is the practice.

Cross-examined: I have known prescriptions not signed. The two prescriptions produced are in the same writing. Savine is more likely to produce death in an advanced stage of pregnancy than at an earlier period. A person taking this drug might be capable of taking a journey the day after the birth; she would not be so capable of taking the journey after an abortive drug. I know there is a book called "Hooper's Medical Dictionary;" I do not use it myself, but have known it used by medical men; it is not in general use; I consider it an old-fashioned book. I am not aware that in "Hooper's Medical Dictionary" there is a prescription of the amount of savine and friar's balsam to be used in diseases of the womb. The examination of a woman's breast would indicate pregnancy, if the breast were seen by the surgeon. It has happened, that a woman has had many indications of pregnancy, and yet she has not been pregnant. I do not think a medical man of less practice than myself, and less skilled, would be likely, in the present day, to use this drug as an emmenagogue. I do not think a medical man of any education, even in a remote part, would be ignorant of the cautions given against the use of this drug.

Re-examined: Even in the old practice, I do not think so large a quantity of savine would be used. There are cases in which disturbed menstruation has been removed by savine; I think it may have that effect, but I have never used it, or known it used. Frequent inspection would not be necessary in cases of diseases of the heart and liver, or interrupted menstruation; if the object were to produce abortion, there would be frequent examinations.

By Mr. Rogers: Miscarriage might take place between the sixth and seventh months without having taken a drug to cause abortion.

Mr. Rogers then addressed the jury on behalf of the prisoner. He was not there to say that Mr. Pascoe stood at the top of his Profession; but he had a considerable practice, and had endeavoured to carry it out with honesty and integrity. Still it must be considered that he lived in a remote place, and had not received his medical education at a recent period. He (the learned counsel) had mentioned a book, "Hooper's Medical Dictionary," which unfortunately he had not been able to get, but which was still used by many; in that book, he believed, savine was recommended, and even Mr. Moorman said it had been used as an emmenagogue. What were the circumstances of this case? Miss Nicholls was under the treatment of Mr. James, but it was at length thought desirable that she should go to the sea-side, and have the attendance of Mr. Pascoe. She says, in her deposition, she told Mr. Pascoe she was suffering from disease of the heart and liver, and whilst she was at Mrs. Hockin's he treated her for that disease. He first gave her medicine, which Mr. Moorman acknowledged was not calculated to procure abortion. And as to the second prescription containing savine, Mr. Moorman admitted, that that had been used for menstrual interruption, from which she was also suffering. There was, however, no proof that the second prescription made up in the shop was that written by Mr. Pascoe; it had been left about in the shop, and there was nothing to identify it as Mr. Pascoe's. But even assuming that the second prescription was Mr. Pascoe's, there was nothing to convict him of any crime. Mr. Pascoe wished to state through him (the counsel), that the prescription he wrote was from a book which he had always used and looked upon as a correct book of prescriptions, and that the prescription was there for the very complaint from which the young woman was suffering. He submitted that Mr. Pascoe had acted quite innocently in this matter; and it was a great misfortune for him that Miss Nicholls was not present, that she might have been placed in the witness-box, and have told them how she had deceived Mr. Pascoe with regard to her pregnancy. She was the better enabled to deceive him, in consequence of her having a dangerous disease affecting her, and being the daughter of a respectable man, Mr. Pascoe had no idea of her pregnancy. There was no evidence that he examined her breast; Mrs. Hockin said she opened the front part of her dress, but that was doubtless to enable Mr. Pascoe to discern the nature of the palpitation of the heart. And even if he had examined, it was admitted by Mr. Moorman, and was a well-known fact, that medical men may be mistaken as to pregnancy. There was only her own statement in her depositions that she had taken the second bottle of medicine, and the jury should receive those depositions with more caution, when unsupported, than if she had appeared in the witness-box to be examined. But even if she took the whole of it, that tended to show it was not a noxious drug, because a considerable time elapsed afterwards before her miscarriage. She went back to Cubert, and asked Mr. Pascoe's servant to be allowed to sleep in the house, and Mr. Pascoe consented to it. Then, as to his giving her salts, what harm could there be in that? He contended, that there was no guilty knowledge or felonious intent on the part of Mr. Pascoe; the most to be said against him was, that he was an unskilled man not to have known the condition of this young woman. Something had been said about attempting secrecy, but he could state, that he had seen prescriptions, by consulting surgeons of the highest class, without their signatures attached; and, when a man was writing for an apothecary who knew his handwriting, as Mr. Michell did Mr. Pascoe's, what object could there be in signing his name? There was also no secrecy in getting rid of the birth, it being a good light when the sexton took away the child. Mr. Pascoe had first treated his patient for the diseases of which she complained; but she, having the misfortune to give birth to a child, he endeavoured to help her to get rid of it. But, if he had had a felonious intent, he would have had the prescription written out in some other handwriting, and would have had the sexton take the body at midnight, also, he would not have run the risk of endangering her life, in an advanced state of pregnancy, if he had known she had been in that state. He contended that, looking at all the circumstances of the case, the jury could not find the prisoner guilty of administering drugs with intent to procure abortion.

The learned Judge, in summing up the case, said, the jury must be satisfied, first, that the prisoner administered the drug; and, secondly, that he did so for the purpose of procuring miscarriage. He then remarked on the evidence, stating that, if the jury believed the second prescription containing savine was written by the prisoner, they had then the young woman's deposition that she had taken the whole of it, and Mr. Moorman's evidence that it is of a noxious nature, and likely to procure miscarriage. Did the prisoner administer that savine for the purpose of procuring miscarriage? To convict of this, they must first be satisfied that he either knew she was pregnant, or believed her to be pregnant. He did not think it likely that Catherine Nicholls would say to him she was pregnant, and wished him to procure abortion; yet persons wishing to commit that crime might communicate without using the precise language. Still, she states in her deposition, that she told Mr. Pascoe she had a complaint of the heart and liver, and that he examined her heart and gave her a prescription. It was not to be assumed that she told him more than this when they were alone, or that he found she was pregnant. But, after this, he wrote a prescription, which, according to Mr. Moorman, if he was a man of competent skill, he must have known would answer no beneficial purpose, and would answer only the purpose of procuring miscarriage. Mr. Moorman seemed to be a respectable medical practitioner, and there was no ground for imputing to him any bad motive; but his evidence only bore fully against the prisoner, *if* the jury were satisfied that he was a man of competent skill in the medical profession; because they found that savine was formerly used in cases of suspended menstruation, but that no man of competent skill, according to the present education of medical men, would use it. It was popularly known, said Mr. Moorman, as the means of producing miscarriage. The jury were to look at all the circumstances, and say whether they thought there was the *intent* to procure miscarriage by administering this noxious drug.

The jury retired from the court, and were absent about an hour and forty minutes. They then returned, and pronounced a verdict of "Guilty." The prisoner was sentenced to be transported for ten years.

MEDICAL NEWS.

Dr. Paris, President of the College of Physicians, and a Deputation comprising Dr. Wilson, censor; Dr. Hawkins, registrar; Dr. Nairne, and Dr. Burrows, had, on Saturday last, an interview with the Right Hon. Mr. Spencer Walpole, at the Home Secretary's office, Whitehall.

Royal College of Surgeons.—At a meeting of the Council yesterday afternoon (the 15th), the following members of the College who had previously undergone the necessary examinations for the Fellowship were admitted, viz.:—

Fernandez, Thomas Francis. Madras Medical Establishment, diploma dated October 5, 1838.

Lander, Thomas Eaton. Shiffnall, Shropshire, April 18, 1842.

Morris, James, Park-street, Grosvenor-square, June 16, 1848.

Apothecaries' Hall.—The following are the names of the gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 8, 1852:—

Clarke, Erlin, Worcester.

King, Joseph, Newbury.

Lewis, Joseph, Cardiff.
Vallance, Thomas James.
Knaggs, Robert, Clapham.
Moon, Frederick.
Bindley, Frank Lane, Burton-on-Trent.
Palmer, Charles, Horton-in-Lindsey.
Walker, George, Harworth-on-Tees, Durham.
Hamerton, John Northend Nicholls, Elland, Yorkshire.
Fountain, John, Cowley, Uxbridge.
Smith, George, Brent.
Hughes, John Roberts, Flintshire.
White, Charles, Doncaster.
Pearse, Robert Bryand, Bath.
Davies, Ebenezer, Swansea.
Ekin, James.

Obituary.—On the 14th March, Mr. Davidson, surgeon of the 43rd regiment, killed in action by the Caffres, while accompanying an escort from King William's Town to Colonel Eyre's division in the Amatolas. He was shot near Bailey's grave, and three of his gallant comrades in arms perished at the same time. On the 4th inst. Dr. E. Whitfield, late of Brompton-crescent, in the 51st year of his age. On the 28th ult., at the Cross, Chester, Mr. James, for many years surgeon in Ellesmere, universally respected. On the 26th February, lost by the wreck of the Birkenhead, Staff-surgeon Laing, and Staff-Assistant-surgeon Robertson. On the 24th of February last, at Antigua, suddenly, of disease of the heart, under which he had suffered for many years, Anthony Musgrave, M.D., treasurer of the island. On the 7th inst., Robert Spittal, M.D., second son of the late Sir James Spittal, of Edinburgh, deeply regretted.

Military Appointments.—43d Foot, Assistant-surgeon Alexander Barclay, M.D., from the 91st Foot, to be surgeon, vice Davidson, killed in action. 45th Foot, John Phillips Cunningham, M.D., to be assistant-surgeon, vice Best, promoted on the Staff. 91st Foot, John O'Neal, gent., to be assistant-surgeon, vice Barclay, promoted in the 43rd Foot. Hospital staff-assistant-surgeon Thomas Best, from the 45th Foot, to be staff-surgeon of the 2nd class, vice Laing, drowned off the Cape of Good Hope. Thomas George Fitzgerald, gent., to be assistant-surgeon to the Forces, vice Robertson, drowned off the Cape of Good Hope. Edward Akers, gent., to be assistant-surgeon to the Forces, vice Smelt, deceased. Thomas Harvey, gent., to be assistant-surgeon to the Forces, vice Ffennelly, promoted on the staff.

Naval Appointments. — Assistant-surgeon James Henry, from the Penelope to the Dolphin; Assistant-surgeon Govett, of the Penelope, to the Myrmidon, vice Mangle, to the Tortoise. These two appointments were made on the coast of Africa.

Militia Appointment. — Commission signed by the Lord Lieutenant of the West Riding of the County of York, and of the city and county of York; 1st West York regiment of yeomanry cavalry, Jonathan Barber, to be surgeon, vice Taylor deceased.

Medical Appointment.—Mr. John Wickham Barnes (of Bath), has been appointed house-surgeon to the Royal Westminster Ophthalmic Hospital.

Royal Medical and Chirurgical Society.—The following gentlemen were elected Fellows of the Society on April 13th. John Hall Davis, M.D.; Robert James Hale, M.D.; James Merryweather, Esq; Walter Hayle Walshe, M.D.

Epidemiological Society.—The annual meeting of this Society was held on Monday, April 5, 1852, at the house of the Royal Medical and Chirurgical Society, 53, Berners-street. Dr. Babington, the President, in the chair. The following donations and subscriptions were announced:—A cheque for twenty-five guineas, from H. T. Hough, M.D.—twenty guineas as a donation, and five guineas as an annual subscription; a cheque for five pounds, as a donation, from Major Hough; a cheque for two guineas, from Sir C. M. Clarke; donations from Lady and Miss Clarke; an annual subscription of one guinea, from Mr. T. H. Filmer, Berners-street. The Report of the Council was read by Dr. McWilliam, Hon. Sec. From the Auditor's Report, it appears that there is in the Treasurer's hands 60*l.* 6s. 6d, and that the present liabilities amount only to 21*l* 6s. 7d. In consequence of the severe indisposition of Dr. Bascome, the reading of his paper on Yellow Fever was postponed until May 3. A paper was read on the Pathology, Causes, and Treatment of Cholera, by George Grant, M.D., Richmond-hill. The office-bearers for the ensuing session were then elected, and the meeting dispersed.

Medical Benevolent College.—At a meeting of the Council, held at the Hanover-square Rooms, on the 6th instant, Dr. Watson was unanimously elected Vice-President of the College; the Rev. Henry Mackenzie, Vicar of St. Martin's-in-the-fields, and the Rev. H. Glossop, Vicar of Isleworth, were also elected Life Governors of the Institution, both these gentlemen having, in their respective districts, kindly preached in aid of the funds of the College.

Queen's College, Birmingham.—The Rev. Dr. Warneford has placed in the hands of James Thomas Law, M.A, Chancellor of the diocese of Lichfield, William Dickens, Esq., Chairman of the County Quarter Sessions, Vaughan Thomas, B.D., and William Sands Cox, F.R.S., the princely sum of 10,000*l.* as an endowment, and 1,000*l.* towards general purposes, of the College, in addition to his former endowments of 1,000*l.* for medical prize essays; 1,000*l.* for medical scholarships; 1,000*l.* for medical tutor; 1,500*l.* for Queen's Hospital; 1,000*l.* for chaplain to the same; 4,400*l.* for divinity professor; 3,500*l.* for the warden, besides other large sums towards the medical library and museums, and towards the expenses of the Royal Charter and supplemental charters.

The Liverpool School of Medicine.—On Monday week, the students of the Liverpool Royal Infirmary School of Medicine held their annual dinner at the Wellington Hotel, Dale-street. There were upwards of thirty gentlemen present, and among them were the lecturers connected with the school, the medical officers of the local hospitals, and gentlemen who were formerly pupils of the school, namely:—Dr. Vose, Dr. Turnbull, Dr. Inman, Mr. Long, Mr. Batty, Mr. Ellis Jones, Mr. M'Cheane, Mr. Fletcher, Mr. Lowndes, Mr. Batty, jun., Mr. Parker, Mr. Harris, Mr. Behrend, etc., etc.

Colchester Medical Society.—At a meeting of this Society, held on the 6th inst., it was unanimously resolved, "That the members of the Colchester Medical Society pledge themselves not to meet professionally any person practising homœopathy, or homœopathy combined with rational medicine; and that any member of the Society violating this pledge will be considered by the Society as acting unprofessionally."

Charity for Hospital Purposes.—The late Dr. Roe, Deputy-Inspector-General of military hospitals, has left the sum of 50*l.* to the County of Down Infirmary, where he received part of his professional education.

Marylebone.—At a recent meeting of the vestry of Marylebone parish, a comparison was drawn between the parochial expenditure for 1850 and 1851. The only portion thereof we have to do with is as follows:—Chemicals and drugs, 1850, 957*l.* 12s. 3d.; 1851, 1093*l.* 13s. 4d.; midwifery, 1850, 172*l.* 16s.; 1851, 189*l.* 10s.; lunatic account, 1850, 2766*l.* 3s.; 1851, 2542*l.* 8s. 1d.; medical salaries, 1850, 786*l.* 0s. 8d.; 1851, 880*l.* 2s. 6d.; the total medical increase for 1851 being 33*l.* 2s.

New Application of Galvanism.—Mr. Hay, lecturer on chemistry at Portsmouth Dockyard, has arrived at Woolwich, for the purpose of instructing the four bombardiers of the Royal Marine Artillery attached to the expedition under the command of Captain Sir E. Belcher, C.B., in the mode of adjusting the plates, covering and attaching the copper wires, and manipulating the sulphuric acid used in galvanic batteries, it being intended to take to the Arctic regions a number of tubes charged with 20 lbs. of gunpowder each, to be used in bursting the ice, in order to force a passage up Wellington Channel with the steamers of the expedition. The cases will be discharged by the electric fluid from a galvanic battery, the persons operating being at a safe distance on board the vessels, as long coils of wires covered with gutta percha will be supplied. Mr. Hay, after instructing the bombardiers, will give lectures on the galvanic battery, and the uses to which it may be applied, in the presence of the whole of the officers of the expedition, previous to their leaving Woolwich on Saturday next, (this day.) the day fixed for proceeding to Greenhithe. The chain cable testing house has been placed at Mr. Hay's control for the facility of carrying out his instructions, and a battery has been prepared for the purpose.

Quassia, Aloes, and Foreign Hops.—By a return printed by order of the House of Lords, the quantities of quassia and aloes imported into the United Kingdom during the last twelve years are shown. In the year ending Jan. 5 last, of quassia there were 1148 cwt. 2 qrs. 5 lbs. imported; and of aloes, 323,817 lbs. By another return, printed by authority of the same House, the quantities of foreign hops charged with duty for home consumption during the same period are stated. In the year ending Jan. 5, 1851, the quantity was 5412 cwt. 3 qrs. 24 lbs., and during the year ending Jan. 5 last, the quantity was 100 cwt. 1 qr. 26lbs.

Common Lodging-Houses.—Proceedings were taken on the 3rd instant, at Bow-street, against seven Irish people, for infringing the regulations of the Act for the improvement of common lodging-houses, an Act which was passed last session. The house, in respect of which the proceedings were taken, was a small one (21)

in Church-lane, St. Giles', a place long known as the "Rookery," and certainly one of the filthiest localities in all London. During the prevalence of cholera in 1832 and 1849, the epidemic was rife and very fatal in this street. The rooms are let at 3s. each, and then sublet to as many as can be crammed into them, 36 persons having been found in a room registered for 7 only. The evidence showed the dimensions of each room in the house, and the number of persons found sleeping in them, the total number being 107, the number allowed by the new regulations being 47, there being consequently 60 more consumers of the deadly mixture called "air," which these unfortunates are compelled to breathe, than the law allows in so small a space. As a natural result, it is difficult to breathe in these rooms, which are, by-the-by, very filthy, and emit a dreadful stench. There is only one privy to the whole house, and that inaccessible from the filth which has overflowed and flooded the yard. The defendants, some of whom could not speak English, pleaded poverty and ignorance of the law. They were discharged with a caution, the magistrate intimating that, in future complaints, the superior landlord must be in attendance.

DEATHS *in the Metropolis for the week ending Saturday, April* 10, 1852.

Causes of Death.	April 10. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	463	354	229	1051	9377
Specified Causes	462	354	229	1047	9337
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	164	47	10	221	1812
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	16	22	45	474
3. Tubercular Diseases	66	136	5	207	1889
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	46	31	20	97	1192
5. Diseases of the Heart and Blood-vessels	2	18	13	33	325
6. Diseases of the Lungs and of the other Organs of Respiration ...	95	60	80	235	1620
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	12	23	13	48	601
8. Diseases of the Kidneys, &c. ...	...	7	10	17	82
9. Childbirth, Diseases of the Uterus	...	7	...	7	89
10. Rheumatism, Diseases of the Bones, Joints, &c.	2	1	...	3	72
11. Diseases of the Skin, Cellular Tissue, &c.	3	...	...	3	12
12. Malformations	6	...	...	6	23
13. Premature Birth and Debility ...	29	1	...	30	194
14. Atrophy	21	3	...	24	162
15. Age	...	...	52	52	502
16. Sudden	2	...	1	3	90
17. Violence, Privation, Cold, and Intemperance	8	4	3	16	198
Causes not Specified	1	...	...	4	40

TO CORRESPONDENTS.

We have to intimate that, in future, all Communications for this Journal must be authenticated; gentlemen, therefore, who address us must favour us with their names,—certainly not for publication, but that we may be satisfied of their good faith. Henceforth, then, it is to be understood, that, when a letter is unnoticed, it is because the writer's card did not accompany it.

We have received communications from the following Correspondents, who, in compliance with the above notice, must favour us privately with their names and addresses;—R. C. H., of University College; M.R.C.S., L.S.A., and a Subscriber; Diogenes Laertius, of Guernsey: A Surgeon, R.N.; A Looker-on.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your Correspondent, "Subscriber," after allowing that I have stated "the case very fairly with regard to Hall and College men," remarks that my "observation is simply absurd," of the College diploma being no test for a man's fitness for general practice. I am simple enough to be unable to see this absurdity. Will "Subscriber" inform us if he has passed both examinations? If so, then he may be able to judge as well as myself on this subject. How an examination confined to anatomy and surgery, as that of the College of Surgeons, can test a man's ability to practise medicine, midwifery, and the diseases of women and children, I cannot understand. The examinations at the College and Hall bear no resemblance, for men who may be able to pass one may be quite unable to pass the other. The Latin examination at the Hall, though not severe, is sufficient to test a man's previous education. Were a man able, by means of a translation, to construe in two or three weeks, I imagine a longer time would be required for him to learn his quantities. The Latin is, however, a secondary matter, though it plucks more men than the medical examination. "Subscriber" admits the M.R.C.S. may not be as well up in chemistry and botany as a pass man must be. What proof is there that he is as well up in materia medica, medicine, and midwifery? There is not much danger of a man's "ignorance being daily exposed by his fellow practitioners," for the chance is, that only now and then will his practice be scrutinised; and, were his treatment wrong, his professional brethren would not think of exposing him.

I agree with "Subscriber," that "the Hall examination is certainly a good one *per se*," and I think that the Hall authorities are acting most culpably and unjustly in not exercising their powers. Its examination may be abused by those who cannot pass it; but has it not been the means of raising the general practitioner to his present high position?

If men without the licence would act as your Correspondent "A Surgeon," general practitioners would have no cause to complain. In writing prescriptions for medical cases, he would be interfering with Physicians, which would be no affair of ours. Unfortunately, although such do not "hang out" "apothecary," many of their fellow members do not confine themselves to "a profession," but belong to "a trade." The majority of men who keep shops and act as general practitioners have not the double qualification, but with the diploma of the College are poaching upon the neighbouring licentiates. How such can satisfy their consciences, that they are keeping the oath they took when they were admitted to the membership,—of their doing their utmost to keep up the dignity of the College, when they are selling pennyworths of hair-oil, lavender-water, besides drugs, soaps, and quack medicines, I leave your dignified Correspondent, "Surgeon," to determine! I must, however, beg to inform him that an L.S.A. does not act illegally when he calls himself a surgeon, for any one may do that, as no diploma is legally required to practise surgery. No one can legally practise medicine in London without a licence from the Hall or College of Physicians. The Legislature, I presume, in rendering a medical examination compulsory, considered that the public could, in a great measure, judge of a man's capability to practise surgery,—therefore protection was here not so needed,—but that they could not judge medical treatment, whether it were correct or not, and that acute disease might be permitted to run its course to a fatal termination without bad practice being detected, for they could not diagnose the disease or analyse the medicines. There are few men who practise as general practitioners who have not passed the College; but of those practising as apothecaries without the licence, the name is "legion."

The general practitioners, as a body, fulfil the requirements of the public,—good medical attendance, with medicines at a moderate charge. Surgeons cannot do this if they "write prescriptions," as the public generally cannot afford to pay a fee and also for medicine. The most respectable general practitioners do not charge for medicine, but include this in a fee of 2s. 6d., 3s. 6d., or 5s., according to the circumstances of the patient. A private dispensary to a general practitioner in large practice is as necessary as one is to an hospital. It is much to be desired that a college of general practitioners should be founded, with the Hall authorities for examiners, as the L.S.A. deserves a better title. Nothing can, however, be more unfair than that men who have been practising illegally, by sufferance, and who could be convicted at any time of a misdemeanour for so doing, should by an act of grace be made lawful practitioners.

The Hall examination has been, and is, the bulwark of the general practitioner, and if this be dispensed with without an equally good one being substituted for it, the days of the general practitioner will be numbered.

I am, &c. M.R.C.S.E. and L.S.A.

[To the Editor of the Medical Times and Gazette.]

Sir,—As the loss of the Birkenhead is just now engaging much attention, I beg to draw yours to one matter which might possibly escape observation. The "Times" states, that six women were confined on the voyage out, and that three died—*i. e.*, one-half.

Can you tell me if this is the average mortality of parturient women in transport-ships? I am, &c.

M.R.C.S.E. and L.S.A.

A Surgeon's letter, in answer to "Justitia," is unsuited for our pages.

Mr. Taylor, Liverpool.—We regret that our want of space will not allow us to comply with Mr. Taylor's request.

Mr. Aubrey had better address the Secretary of the Service.

A Surgeon, R.N., is surely under a mistake.

Mr. Sandford, of Stowmarket.—The communication on Reform in Medical Nomenclature was marked for publication; but, having appeared in a Contemporary, need not now be repeated.

The following communications are in type:—

Mr. James Vose Solomon—Cases and Observations illustrating the Therapeutic Efficacy of Diluted Hydrocyanic Acid as a Topical Application in Certain Affections of the Eye.

Mr. G. M. Jones—On Excision of Joints.

Mr. F. W. Pavy—Hospital Report.

Mr. W. Michell Clarke—Hospital Report.

Mr. J. C. Hall—On the Administration of Chloroform.

Mr. Charles F. Hodson—On Cannabis Indica in Traumatic Tetanus.

Mr. John Horsley—On Albumen and Arsenic.

COMMUNICATIONS have been received from—

The Secretary of the Pharmaceutical Society; Dr. Foley, of Kilrush—On Dumbness after Typhus Fever; Dr. Waller, of Finsbury-square; Mr. Pretty, of Bayham terrace—On the Mortality of Parturient Women in Transport-ships; Dr. Jeanneret, of Finchley-road—On the Extraction of Spiculæ from the Cornea; Dr. Carr, of Rusholme—Case of Gangrenous Thecal Inflammation of the Hand from a Rite; Mr. Aubrey, of Rrompton; Mr. G. S. Taylor, of Liverpool; The Hon Secretary of the Epidemiological Society; Mr. Sibley, of Middlesex Hospital; Dr. Roe, of Plymouth—On Uterine Diseases and their Treatment; Dr. Cotton, of Clarges-street; Mr. Alfred Roberts, of Rye; Mr. C. A. Newnham, of Wolverhampton—Case of Congenital Hydrocephalus with Breech Presentation; Mr. Clendon, of Albemarle-street; Dr. Herbert Davis, of Finsbury-square; Dr. Gairdner, of Edinburgh; Dr. Detton, of Spanish-place; Dr. Fleming, of Cork; A Surgeon; Dr. Richardson, of Mortlake; Dr. Ramsbotham, of Portman-square; Mr. Terry, jun., of Northampton.

King's College, London.—Medical

DEPARTMENT.—The SUMMER SESSION for 1851-2, will commence on TUESDAY, APRIL 27, when new students will be admitted.

All students entering at this period will be entitled to compete for the Two Warneford Scholarships of £25 per annum for three years, which will be given in October next.

The examination will be in the following subjects:—Divinity, the Classics, Mathematics, and the Modern Languages.

The particular books selected for examination, and all other information, may be obtained from J. W. Cunningham, Esq., Secretary, King's College, London.

March, 1852. R. W. JELF, D.D., Principal.

University College, London.—Faculty

of MEDICINE.—The SUMMER TERM will commence on SATURDAY, MAY 1.

Classes in the order in which the Lectures are delivered during the day—

BOTANY—Professor Lindley, Ph. D.
PATHOLOGICAL ANATOMY—Professor Jenner, M.D.
MEDICAL JURISPRUDENCE—Professor Carpenter, M.D.
PRACTICAL CHEMISTRY—Professor Williamson, Ph. D.
MEDICAL CLINICAL LECTURES—Dr. Walshe, Dr. Parkes, and Dr. Garrod.
SURGICAL CLINICAL LECTURES—Mr. Quain and Mr. Erichsen.
COMPARATIVE ANATOMY and ZOOLOGY—Professor Grant, M.D.
PALÆO-ZOOLOGY—Professor Grant, M.D.
MATERIA MEDICA and THERAPEUTICS—Professor Garrod, M.D.
MIDWIFERY—Professor Murphy, M.D.
Hospital Practice daily.

Prospectuses may be obtained at the Office of the College.

THOMAS GRAHAM, Dean of the Faculty.
April 8, 1852. CHAS. C. ATKINSON, Secretary to the Council.

Westminster Hospital School of

MEDICINE.

The SUMMER COURSES of LECTURES will be COMMENCED on MONDAY, MAY 3rd.

MATERIA MEDICA—Dr. Basham.
MIDWIFERY—Dr. F. Bird.
FORENSIC MEDICINE—Dr. Fincham and Dr. Tanner.
BOTANY—Dr. Radcliffe.
PRACTICAL CHEMISTRY—Harman Lewis, M.A.
NATURAL PHILOSOPHY—Charles Brooke, F.R.S.

Particulars may be obtained by application to

F. J. WILSON,
Secretary of the Westminster Hospital.

Hunterian School of Medicine,

1, BEDFORD-STREET, BEDFORD-SQUARE. Established in 1832 by the late Mr. DERMOTT. The SUMMER SESSION will commence MAY 1.

CLINICAL MEDICINE—Dr. Aldis, F.R.C.P.
CLINICAL SURGERY—Mr. N. J. Dampier, F.R.C.S.
MORBID ANATOMY—Dr. Ramskill.
MIDWIFERY—Dr. R. Barnes and Dr. Manson.
MATERIA MEDICA—Dr. George Smyth.
PRACTICAL CHEMISTRY—Mr. Ashley.
FORENSIC MEDICINE—Dr. Manson.
BOTANY—Mr. C. P. Johnson.

For all the Lectures required by the Royal College of Surgeons and Apothecaries' Hall, 33 Guineas, including hospital practice, 58 Guineas.

Apply to Dr. Aldis, 1, Chester-terrace, Chester square; or at 28, Bedford-square.

Theatre of Anatomy and Medicine,

adjoining St. George's Hospital, 1, GROSVENOR-PLACE.—The SUMMER SESSION will commence on SATURDAY, MAY 1, at Half-past Two o'clock, when the Prizes awarded in the Session 1851-52 will be publicly presented.

LECTURES.

BOTANY—Dr. Lankester, F.R.S., F.L.S.
PRACTICAL CHEMISTRY—Mr. Rodgers.
MICROSCOPICAL ANATOMY—Mr. G. E. Rlenkins.
MATERIA MEDICA—Dr. Lankester, F.R.S., F.L.S.
MIDWIFERY—Mr. Bloxam.
MEDICAL JURISPRUDENCE—Mr. Warder.

Fee, admitting the Student to attend all Lectures required by the Medical Examining Boards, Forty-two Guineas.—Further particulars may be obtained on application at the School, or at the residences of the different lecturers.

Sydenham College, Birmingham.—

12, ST. PAUL'S-SQUARE.

The SUMMER SESSION will COMMENCE on MONDAY, MAY 3rd.

MIDWIFERY and the DISEASES of WOMEN and CHILDREN—F. Elkington, M.D., Senior Medical Officer to the Lying in Hospital.

MATERIA MEDICA—John Bassett.

THERAPEUTICS and the TREATMENT of DISEASE—J. Russell, M.D., Physician to the Birmingham Dispensary.

BOTANY—Frederick Westcott, Ass. L.S.

FORENSIC MEDICINE—W. C. Orford, Surgeon to the Birmingham Dispensary.

DEMONSTRATIONS in PRACTICAL CHEMISTRY—Alfred Hill.

A Reading Room is provided for the use of the Students, where the standard medical periodicals are taken in; and free access is given to the Museums of Anatomy, Physiology, Pathology, and Materia Medica.

April 12th, 1852. BELL FLETCHER, M.D., Principal.

Guy's.—The Summer Session Com-

MENCES on SATURDAY, the 1st of MAY. Gentlemen desirous of becoming STUDENTS must give satisfactory testimony as to their education and conduct. They are required to pay £40 for the first year, £40 for the second year, and £10 for every succeeding year of attendance; or the sum of £100 in one payment will entitle a student to a Perpetual Ticket.

Dressers, Clinical Clerks, Assistants, and Resident Obstetric Clerks, are selected according to merit from students who have attended a second year.

LECTURES, &c.

PRACTICAL DEMONSTRATIONS on CUTANEOUS DISEASES—Dr. Addison.
MATERIA MEDICA—Dr. Golding Bird and Dr. Owen Rees.
CLINICAL LECTURES—Dr. Hughes, Dr. Golding Bird, and Dr. Owen Rees.
MIDWIFERY—Dr. Lever and Dr. Oldham.
MEDICAL JURISPRUDENCE—Dr. Alfred Taylor.
DENTAL SURGERY—Mr. Bell.
COMPARATIVE ANATOMY—Dr. Gull and Dr. Habershon.
OPHTHALMIC SURGERY—Mr. France.
PRACTICAL CHEMISTRY—Dr. Odling.

Dr. Habershon will superintend the studies of those who intend to graduate.

Mr. Stocker, Apothecary to the Hospital, is authorized to enter the names of Students, and to give further information if required.

Addenbrooke's Hospital (in the Town

of Cambridge.)—HOUSE APOTHECARY.—Notice is hereby given, that a Special General Court of the President and Governors of the above Institution will be held at the Board Room of the said Hospital, at Half-past Ten o'Clock of the morning of the 26th of May next, for the ELECTION of a gentleman to fill the office of HOUSE APOTHECARY, vacant by the resignation of Mr. Henry Mitchell. The gentleman elected will have to reside, and will be boarded in the Institution. The salary is £86 a-year. All candidates must be duly qualified, and must forward testimonials as to ability and character, sealed up, under cover, to the Secretary, before the 21st day of May, and must produce their qualification to the Court on the day of election.

And notice is hereby further given, that in case of a contest, votes will be received by the Court, at the Board Room, from Twelve o'clock at Noon until 5:30 o'clock in the afternoon of the said 26th day of May, when the Election will finally close.

Ladies only can vote by proxy, forms of which, and all particulars, may be had upon application at the Office of the Secretary.

By Rule 24, no Governor can be allowed to vote whose subscription is unpaid, nor unless he has been a Governor for six months, except he be a Benefactor of Twenty Guineas and upwards.

All annual subscriptions became due on the 29th of September last, and as subscriptions are paid in advance for the current year, all Governors by yearly subscription of Two Guineas or upwards must pay their subscriptions up to September 29th, 1852, together with all arrears, if any, to Thomas Mortlock, Esq., Banker, Cambridge, the Treasurer, before their vote can be received.

By order,

FREDERICK BARLOW, Secretary.

St. Andrew's-street, Cambridge, April 2nd, 1852.

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ORIGINAL LECTURES.

LECTURES

ON

THE PATHOLOGY AND DIAGNOSIS OF RENAL DISEASES;

BEING THE GULSTONIAN LECTURES.

DELIVERED AT

The Royal College of Physicians,

By GEORGE JOHNSON, M.D. Lond.

Fellow of the Royal College of Physicians, and Assistant Physician to King's College Hospital.

(Continued from page 338.)

Lecture II.

In the concluding part of my previous lecture I gave some account of a form of renal disease, which it has been proposed to call "chronic desquamative nephritis," one of its most constant and characteristic features being a continued shedding of epithelium from the uriniferous tubes. The history which I then gave of the pathological changes which the renal tissues undergo during the progress of the disease had reference chiefly to the tubes and their epithelial lining.

I purpose now to describe the morbid changes which affect the blood-vessels of the kidney, and in immediate connexion with this subject to give some explanation of the albuminous condition of the urine and of the dropsy which are so commonly associated with this and other forms of renal disease. The reason for placing these subjects in juxta-position will be apparent, when it is seen that they are remarkably illustrative of each other; and that, in particular, the condition of the renal blood-vessels throws much light upon the immediate cause of albuminous urine.

The substance of what I have to communicate upon these points has been published in the "Transactions of the Medico-Chirurgical Society;" and I should scarcely feel justified in repeating these observations at so great a length as I am about to do, were it not, that I shall hereafter have to use them in support and confirmation of some doctrines which could not be made intelligible, without a reference to the facts and inferences to which I now request your attention.

The appearances in the renal blood-vessels in connexion with the chronic desquamative disease, are such as indicate an impediment to the circulation through the inter-tubular capillaries, and a consequent increase of pressure upon the vessels which, in the order of the circulation, lie behind these. The Malpighian capillaries and the arteries have their coats remarkably thickened, while the walls of the inter-tubular capillaries and of the veins present no appearance of hypertrophy or thickening.

I will now describe, in detail, the appearances which I have observed in each set of vessels, viz., the arteries, the Malpighian capillaries, the inter-tubular capillaries, and the veins.

ARTERIES.

The minute branches of the arteries have two fibrous coats; the inner coat being longitudinal, and the outer circular. The inner coat is, in the normal state, much thinner than the outer. The two layers of fibres appear to be of the same nature, and, in all probability, they are muscular,—a conclusion which is supported by a consideration of the pathological changes which they undergo. The most remarkable and interesting of these changes is hypertrophy of these fibrous or muscular walls; it affects both layers of fibres; but whereas, in the healthy condition, the inner layer is considerably thinner than the outer, they are usually, when hypertrophied, of nearly equal thickness. The thickening appears to be proportionally greater in the smallest arteries, *e. g.*, in the afferent vessels of the Malpighian bodies, and gradually diminishes in passing from these vessels towards the arterial trunks. The thickening is not associated with any other structural change in the arteries; but it appears to be an instance of simple hypertrophy, increased bulk, that is, without change of structure. The cases which are most favourable for examining this condition are those which are marked by extreme wasting and contraction of the kidney. In such cases I have frequently seen the coats of the arteries, at least two or three times thicker than in the normal state. I have frequently observed that the thickened arteries are much more tortuous than the vessels in a healthy condition. This may, perhaps, be a consequence of the arteries still retaining their original length, while they are packed within a smaller compass,—a necessary result of the wasted condition of the kidney, which is commonly associated with the greatly hypertrophied and tortuous condition of the vessels. In those kidneys, or in those parts of a kidney which present the appearances of a less advanced disease, the arterial hypertrophy is either less decided, or it may be entirely absent. The canal of the arteries appears to be of the normal size; it remains pervious, and may readily be filled with injection, until a very advanced period of the disease, when it may often be observed, that some arteries have oil globules collected within their canals. It is probable that this fatty deposition is a consequence, and not a cause of the arrest of the circulation. It appears to be an instance of the tendency to fatty deposit in parts whose functions have ceased, and especially when there exists a cavity wherein the deposit may take place. There seems to be a strict analogy between this fatty accumulation in the arterial canals, and that which occurs simultaneously in some of the uriniferous tubes, after the destruction of their epithelium, and the consequent cessation of their functions.

It is by no means improbable, that the fatty matter which is found in the arterial canals may result from a molecular change in some constituents of the stagnant blood contained in the vessels. Some very interesting observations on the apparent conversion of proteine compounds into fat, both in the living body, and in some of the tissues after death, will be found in Dr. Quain's valuable paper, "On Fatty Diseases of the Heart." (a)

MALPIGHIAN CAPILLARIES.

When speaking of acute nephritis, I described the condition of the Malpighian capillaries in cases of recent disease. The slightest departure from the normal state being an extreme fulness of the vessels, and this going on in some cases to rupture of the capillaries and hæmorrhage into the tubes, and, in other instances, to a gradually increasing opacity and thickening of the capillary walls, in consequence of which the blood within them assumes a peculiar aspect, and its corpuscles appear magnified. The appearances referred to may occasionally be seen in some parts of a kidney which is in an advanced stage of chronic nephritis; but the greater number of the Malpighian capillaries will be found to have undergone still further changes.

The capillaries in the normal state have not a fibrous structure, nor is there any appearance of such tissue in the diseased vessels. The coats of the vessels are much thickened, but homogeneous in structure, and the canals are apparently normal, or perhaps slightly narrowed. The Malpighian vessels may sometimes be very completely filled with injection; in other instances the tuft is only partially filled; and again, in others, the injection proceeds no further than the termination of the afferent artery. The entire Malpighian body is not sensibly enlarged; but the increased thickness of the capillary walls leads to a close packing and crowding of the vessels, so that their outline can scarcely be distinguished. The surface of the vessels is usually smooth and free from deposit, and the entire tuft presents a peculiar, whitish, opaque, and sometimes a waxy appearance. In some instances the surface of the vessels is roughened by an indistinctly granular material, probably of a fibrinous nature, which appears to have coagulated upon the vessels after escaping from their canals; but very rarely is there any appearance of an organised effusion, either fibrous or cellular, within the Malpighian capsule. The addition of acetic acid to the Malpighian vessels in the opaque condition before described will frequently render their walls transparent, so as to show the blood corpuscles within them; thus proving that many of those Malpighian bodies which, at the first view, appear to be bloodless, yet contain blood-corpuscles within them which were concealed by the opaque and thickened capillary wall. Finally, the Malpighian bodies become entirely bloodless, the vascular tuft being atrophied and the capsule shrivelled, and occasionally, as in the arteries under like circumstances, small

(a) *Medico-Chirurgical Transactions*, vol. xxxiii.

clusters of oil-globules may be seen in the canals or in the walls of the decayed vessels.

The Malpighian bodies, therefore, undergo changes which may be recapitulated in the following order: first, engorgement of the capillaries, sometimes ending in rupture of the vessels and hæmorrhage into the tubes. Secondly, a gradually increasing thickening and opacity of the capillary walls, with, at first, a changed appearance of the blood corpuscles, and subsequently a complete concealment of the contents of the vessels. Thirdly, a final cessation of the circulation, with atrophy and shrinking of the vessels and of their investing capsule.

The thickened condition of the capillary walls in the advanced stages of the disease affords a satisfactory explanation of the well-known fact, that hæmaturia to any considerable extent is a rare occurrence in cases of that chronic form of disease to which I now particularly refer. The cortical substance of the kidney occasionally contains some of the red spots composed of convoluted tubes filled with blood which has escaped from ruptured Malpighian capillaries.

A deep, smoky, or blood tint in the urine, accompanied by that conclusive evidence of the renal origin of the blood which is derived from the fact of its having been moulded in the uriniferous tubes (in the form of blood-casts), is usually an indication of acute and recent disease in the kidney.

The examination of the inter-tubular capillaries in cases of chronic desquamative disease gives, for the most part, a negative result. It is usually very difficult to inject them, or to see them in an uninjected condition. When they can be clearly defined, their walls present no appearance of hypertrophy or thickening; and in this respect they form a remarkable contrast with the arteries and Malpighian capillaries, whose condition I have just now described. It seems reasonable to infer, that the inter-tubular capillaries gradually waste, together with the tubes among which they are distributed; and it is probable that the two tissues undergo a simultaneous process of atrophy consequent upon the destruction of the epithelial lining of the tubes.

VEINS.

The minute branches of the veins are in essentially the same condition as the inter-tubular capillaries. The evidence of their atrophy and obliteration is clearly seen upon the capsular surface, where the lobular divisions which are formed by the minute branches of the venous radicles are more or less completely erased, and the tissue assumes a pale and exsanguine appearance. A microscopical examination of the coats of the veins detects no appearance of thickening or hypertrophy. The larger divisions of the veins are occasionally shrunk and contracted, and not unfrequently they contain firm coagula of blood, which adhere more or less closely to the walls of the vessels.

The explanation which I have to offer of the phenomena of albuminous urine and dropsy was first suggested to me by some experiments which were performed by the late Dr. John Reid, and which are described in his essay "On the Order of Succession in which the Vital Actions are Arrested in Asphyxia."(a) The principal facts and arguments therein contained, which concern us in our present inquiry, are the following:—When the trachea of an animal has been obstructed by the insertion of a tube with a closed stop-cock, dark blood is at first transmitted freely through the lungs and reaches the left side of the heart, by which it is driven throughout all the textures of the body. As the blood becomes more venous, its circulation through the vessels of the brain deranges the sensorial functions, and rapidly suspends them, so that the animal becomes unconscious of all external impressions. For about two minutes after the animal has become insensible, and while the blood in an exposed and unobstructed artery is equally black with that in the accompanying vein, the large arteries become more distended than when the animal was freely breathing atmospheric air. At the same time, a hæmadynamometer being placed in the artery of one limb, and a similar instrument in the corresponding vein of the other, the former indicates an increase and the latter a diminution of pressure as compared with that observed in the same vessels before the air was excluded from the lungs, this evidently resulting from an impediment to the passage of black unaërated blood through the systemic capillaries. At the expiration of the time before-mentioned, viz., about two minutes, the instrument in the artery indicates a diminution of pressure, the mercury at first falling very slowly, and afterwards very rapidly, in consequence of the blood being arrested in the pulmonary capillaries, and so accumulating in the right side of the heart and in the veins. If, now, the stop-cock is opened so as to admit fresh air into the lungs, they instantly transmit the blood which was before stagnant within them, and the arterial instrument again shows an increase of pressure upon the walls of the vessel.

Dr. Reid then quotes some observations by Dr. Alison, tending to show that the arrest of blood in the pulmonary capillaries is to be referred to an interesting law in physiology in accordance with which the movement of nutritious juices is influenced by the chemical changes; or, as Dr. Alison says, "the vital attractions connected with the chemical changes constantly going on in the capillary vessels between these juices and the surrounding tissues, by which nutrition and secretion are effected. Before arterial blood can be transmitted freely through any tissue or organ, it is necessary not only that the contractions of the heart be performed with a certain amount of force, but that the actions of nutrition and secretion be also in operation; so in the same manner before the blood can be transmitted through the lungs, it is not only necessary that the right side of the heart retain its contractility, but that the chemical changes between the blood and the atmospheric air should proceed." This doctrine is still further illustrated by Dr. Reid's experiment just now described, which shows that when the blood in the systemic circulation becomes decidedly venous and, consequently, unfit for carrying on the process of nutrition, it passes less freely through the capillaries into the veins.

The observations and inferences of Drs. Reid and Alison seem to be applicable, by way of analogy, to the subject of renal disease, and will assist us in our efforts to determine the proximate cause of the albuminuria and the dropsy which are so commonly associated with diseases of the kidney.

Assuming that the renal circulation is affected by an imperfect elimination of the urinary constituents, in a manner analogous to that in which the pulmonary circulation is influenced by the retention of carbonic acid in the blood, we should expect to find, that, as a consequence of disease in the tubes and in the secreting epithelium, the circulation would first be impeded in the inter-tubular capillaries. The obstruction would, of course, exert an influence, extending backwards in the order of the circulation, so that the Malpighian capillaries, and the arteries which supply them, would become gorged with blood, this engorgement being exactly analogous to that of the right side of the heart and of the venous system in animals after death from asphyxia.

There are certain facts which afford a remarkable confirmation of that which, at the first view, might seem to be a mere hypothesis, or at best only a probable analogy. That the circulation through the inter-tubular capillaries is retarded, and that the Malpighian capillaries are consequently subjected to a greatly-increased pressure and distention, would seem to be indicated by the escape of serum and blood, which so constantly occurs during an attack of acute desquamative nephritis. There appears no reason to doubt that these materials escape from the Malpighian capillaries which lie uncovered within the dilated ends of the tubes. The Malpighian vessels present the peculiar appearances before described as connected with the transudation of serum; and frequently the capsule is filled with blood which has escaped from the ruptured vessels within it. The only vessels besides these from which the hæmorrhage could possibly occur, are the inter-tubular capillaries; and it is little less than certain that these are not the sources of the hæmorrhage. For, first, the rupture of these vessels must, of necessity, be associated with some inter-tubular extravasation, which, to say the least, is an extremely rare occurrence; and, secondly, the blood could not escape from the inter-tubular capillaries into the tubes, without passing through the basement membrane of the tube, which never, in cases of acute nephritis, presents any appearance of tearing or perforation.

But still more conclusive evidence of impeded circulation, and of the precise point at which the impediment occurs, is afforded by the condition of the renal blood-vessels in cases of chronic nephritis. It is clear that the only explanation

(a) Physiological, Anatomical, and Pathological Researches. P. 17.

which can be given of the state of the blood-vessels which I have described is, that the blood is impeded in its passage through the inter-tubular capillaries. The impediment re-acts backwards upon the Malpighian capillaries, the coats of which gradually become thickened by a preservative process of hypertrophy, which is intended to enable them to bear the increased pressure to which they are subjected.

Simultaneously with these changes in the Malpighian capillaries, the muscular walls of the arteries become hypertrophied, so as to assist in driving the blood onwards through those vessels in which the impediment exists.

It is evident, that the obstruction is in the inter-tubular capillaries. It cannot be in the trunks of the veins; for, in that case, the inter-tubular capillaries would be distended and perhaps ruptured during an attack of acute disease; and as a result of chronic disease, their walls would become thickened, like those of the Malpighian capillaries, the contrary to which appears to be invariably the case. And, again, that the impediment is *in front* of the Malpighian capillaries, and not in them, appears to be sufficiently proved by the great distension and rupture of these vessels in acute nephritis, and by their canals remaining pervious, while their walls become thickened in consequence of chronic disease. The fact, that the arterial coats and the Malpighian capillary walls undergo a similar process of hypertrophy, modified only by the natural difference in their structure and functions, is additional evidence that both sets of vessels are alike behind the seat of obstruction, which, I repeat, must be in the intertubular capillaries.

It seems better to avoid any hypothesis as to the actual and immediate cause of the obstruction, whether spasm of the vessels or adhesion of the blood to their walls, or the diminution of any attractive influence which the gland cells may normally exert upon the circulating fluid. The data which we possess are insufficient for determining this point; and it appears impossible at present to do more than simply associate the phenomena of obstructed circulation with such an altered condition of gland cells as interferes with the prompt and complete purification of the blood. The blood is sent to the cells for the purpose of giving up certain of its constituents; and until it has done so, it is not permitted to pass freely onwards. And, finally, when the cells have been entirely destroyed and removed, the circulation ceases, and the tubes and vessels simultaneously waste; this being, as it appears, a natural result of their loss of functional power. The escape of serum from the Malpighian vessels, and the frequent occurrence of hæmorrhage into the tubes, are natural and intelligible consequences of an impeded circulation through the inter-tubular capillaries.

Dr. Robinson obtained this result experimentally by placing a ligature on the renal vein of a rabbit; in consequence of which the urine became albuminous and bloody. He performed this experiment several times, and with an almost uniform result.

It is not probable that the escape of these materials from the Malpighian capillaries is a merely physical process of transudation, but rather that it is the result of a secretory effort to relieve the over-distended vessels.

In the abundant secretion of albumen which attends all the forms of renal disease which have their origin in a morbid state of the blood, consists one remarkable difference between the diseases of the kidney and those of the liver. I believe that I am correct in saying, that an albuminous condition of the bile is an extremely rare occurrence; indeed, I have the authority of Dr. Budd for the statement. The explanation of this diversity is to be found in the fact, that the kidneys, unlike the liver, have two sets of capillary vessels. The inter-tubular capillaries correspond with the capillaries of the liver—they are the immediate seat of the obstruction, which occurs as a consequence of disease in the cells; and the escape of serum from the Malpighian capillaries is a natural and necessary result of that obstruction. If the kidneys were not provided with the Malpighian bodies in addition to their other vascular apparatus, there is reason to suppose that the urine would contain albumen and blood as rarely as the bile is found to do. The convoluted tubes of the kidney resemble, in the thickness of their epithelial covering, the mucous membranes, whose diseased conditions are not ordinarily attended by a decidedly albuminous secretion. And even when the inflammation of a mucous membrane leads to the formation of pus or the escape of blood, the albumen, which forms a constituent part of these products, is rarely so abundant as to render the secretions coagulable in the same degree as the urine is found to be in many cases of renal disease which are unaccompanied by suppuration or hæmorrhage. While the convoluted tubes and the *mucous* membranes resemble each other in the before-mentioned particulars, there is, in some respects, a close analogy between the Malpighian bodies and the *serous* membranes. For whereas the Malpighian capillaries are entirely bare within their investing capsule, the vessels of serous membranes are covered only by tissues of extreme delicacy and tenuity, through which the serum of the blood transudes with great facility, as may be seen in the albuminous effusions, whether dropsical or inflammatory, which are found in the cavities of serous membranes.

And with reference to this point, it is not without interest to observe, that whereas the thick covering of glandular epithelium in the convoluted tubes appears to prevent an albuminous effusion through this portion of the renal tissues, yet when, as a consequence of disease, the epithelium has been removed, leaving the basement membrane denuded or covered only by the delicate transparent cells which I have before described, so that the tubes are, in fact, brought into the anatomical condition of a serous membrane; in these circumstances, the liquid contents of the tubes, or, in other words, of the cysts which are developed from them, are found to be more or less albuminous.

When describing the condition of the urine in the different stages of chronic nephritis, I stated, that in the later periods of the disease, the quantity of albumen is sometimes much diminished, a fact which is easily explained by reference to the successive changes in the renal blood-vessels which I have already described, beginning with great engorgement and ending with a complete arrest of the circulation and atrophy of the vessels. It is evident that, *cæteris paribus*, the quantity of albumen will be in proportion to the number of blood-vessels, whose over-distension leads to the escape of the serous part of the blood, and that a diminution of the albumen is a natural consequence of that atrophy and obliteration of the vessels which occur so generally in the advanced stages of the disease.

With reference to the subject of *renal dropsy*, analogy would suggest the very great probability, that it is the result of an impeded circulation through the systemic capillaries, consequent upon the retention of the urinary constituents in the blood, and that the obstruction thus originating is similar to that which Dr. Reid detected by the hæmadynamometer when black unaërated blood was circulating through the arteries and the systemic capillaries of the animals which were the subjects of his experiments. There is one fact which, *per se*, is almost sufficient proof that the systemic capillary circulation is actually impeded in the way supposed, in consequence of an incomplete excretion of urine. I allude to the frequent occurrence of hypertrophy of the left ventricle of the heart in cases of chronic renal disease, where there is no disease of the valves or large vessels to account for such hypertrophy. The very frequent concurrence of cardiac and renal disease was long since pointed out by Dr. Bright.(a) In passing under review the chief morbid appearances observed in one hundred cases of renal disease, Dr. Bright thus alludes to the subject of cardiac disease:—

"The deviations from health in the heart are well worthy of observation; they have been so frequent as to show a most important and intimate connexion with the disease of which we are treating; while, at the same time, there have been 27 cases in which no disease could be detected, and 6 others which, from not having been noted, lead to the belief that no important deviation from the normal state existed. The obvious structural changes in the heart have consisted chiefly of hypertrophy with or without valvular disease; and, what is most striking, out of 52 cases of hypertrophy, no valvular disease whatsoever could be detected in 34; but in 11 of these 34, more or less disease existed in the coats of the aorta; still, however, leaving 23 without any probable organic cause for the marked hypertrophy generally affecting the left ventricle. This naturally leads us to look for some less local cause for the unusual efforts to which the heart has been impelled; and the two most ready solutions appear to be, either that the altered quality of the blood affords irregular and unwonted stimulus to the organ immediately; or, that it so affects the minute and capillary circulation as to render greater action necessary to force the

(a) Guy's Hospital Reports, Vol. I.

blood through the distant subdivisions of the vascular system."

The latter of the two explanations thus suggested by Dr. Bright is that to which analogy would point as the true one; and the probability of there being an obstruction of the kind supposed is scarcely lessened by the occurrence of a certain number of cases of chronic renal dropsy in which the left ventricle is not hypertrophied; for a contrary conclusion would as little apply to these cases as to cases of actual disease of the valves. It would be an error to suppose, that narrowing of the aortic orifice is not a real impediment to the onward passage of the blood, and a cause of the hypertrophy with which it is frequently associated; because in some cases, with an equal narrowing of the orifice, the ventricular walls do not exceed their normal thickness. The absence of hypertrophy is, in such instances, the result of defective nutrition of the muscular substance of the heart, and an unfavourable circumstance for the patient, whose life would probably have been prolonged by the aid of the compensative process in question. It may readily be supposed, that if Dr. Reid's experiments could have been indefinitely prolonged upon one or more animals, the impeded capillary circulation, and the increased pressure upon the arterial walls, would have been associated with hypertrophy of the left ventricle; and I repeat, that such hypertrophy, without imperfection of the valves or large vessels, when found in conjunction with chronic renal disease, is important evidence of impeded capillary circulation, consequent upon the altered qualities of the blood, and that the impediment is analogous to that which Dr. Reid has so clearly demonstrated in the case of asphyxia.

The existence of capillary obstruction being admitted, dropsical effusion appears to be a natural and a necessary consequence. It follows, too, that an albuminous condition of the urine, and dropsical effusion into the arcolar tissue and serous cavities, must result from strictly analogous conditions, viz., an arrest of poisoned blood in capillary vessels, and a consequent effort to lessen the engorgement and distension of the vessels by a process of serous excretion or transudation through the capillary walls.

From the point of view which we have now reached, it may be useful to look back upon some of the morbid phenomena of chronic nephritis, and to do this with especial reference to one of the general propositions which I enunciated in my first lecture, viz., that "many of the pathological changes which the renal tissues undergo may be shown to have an essentially beneficial object and tendency, while others among the morbid phenomena are either necessary or accidental ill consequences of pathological conditions which had primarily a wholesome tendency."

The subject of inveterate gout is supposed to have his blood contaminated by certain morbid matters, of the nature of which we at present know very little, although of their actual existence we may be nearly certain. An effort is made to eliminate these morbid products by that modified act of secretion which leads to a desquamation of the gland-cells from the uriniferous tubes. It is probable that this wholesome effort is more or less efficient for the accomplishment of its object; but a constant generation of the morbid materials in the blood, and a consequent continuance of the desquamative process, at length destroy the secreting cells, and render the tubes unfit for the discharge of their functions, in consequence of which the blood becomes poisoned by urinary excrement. Some of the tubes now waste and disappear, while others become filled by unorganized fibrin. Still, however, some of the tubes, after the destruction of their glandular epithelium, continue to secrete water, and in this way diminish the tendency to dropsy; for, although a great degree of general dropsy is sometimes associated with an abundant secretion of urine, yet it is doubtless true, that the tendency to dropsical effusion is, *cæteris paribus*, in direct proportion to the quantity of water in the blood, and that free diuresis is often effectual for the removal of dropsy. And, in reference to this point, we may notice the fact, that, as no form of renal disease is attended by so abundant a secretion of urine as this chronic nephritis, so there is none which so frequently passes through all its stages without the occurrence of dropsy in any form or degree; and hence it happens, that the renal disease has often made great progress before its presence is suspected.

One of the occasional *ill* consequences of the secretion of a serous or a watery liquid by the tubes, after the destruction of their normal epithelium, is the dilatation of some obstructed tubes into cysts, which, when numerous, and of large size, must act injuriously, by encroaching upon the surrounding tissues.

We come now to the consideration of the circulation, as affected by the disease in the secreting cells; and we find that the blood is not allowed to pass freely through the inter-tubular capillaries until it has given up to the gland-cells those materials which form a constituent part of their secretion. Although we are ignorant of the precise mode in which this impediment is effected, yet we can readily believe, that the free transmission of unpurified blood through the vessels of an excretory gland would be a greater evil than any which results from the impeded state of the circulation through the gland. The first and obvious effect of the impediment is engorgement of the arteries and Malpighian capillaries; and this, again, is lessened by the escape of serum or blood from the Malpighian vessels. The urgent symptoms in acute nephritis are often relieved by a free hæmorrhage; and, in accordance with this, is the great and immediate benefit which is frequently derived from cupping on the loins. The relief being shown in a diminution of pain, an increased secretion of urine, and a removal of coma or other urgent symptoms of blood-poisoning. Then, on the other hand, the injurious influence of a profuse hæmorrhage, or of a long-continued drain of albumen, is manifest in the impoverished condition of the blood which they induce. The impeded intertubular circulation is compensated by the increased action of the hypertrophied arteries; and, without this efficient aid, it is likely that the renal circulation would quickly be arrested. But, again, it is probable that the forcible arterial action increases the serous transudation from the Malpighian capillaries, and the consequent drain upon the blood. Yet, once more, there is a provision for lessening this, or, at any rate, for diminishing the risk of hæmorrhage in the gradually increasing strength and thickness of the Malpighian capillary walls.

Still, applying the same mode of reasoning to the secondary consequences of renal disease,—I mean to those which result from the contamination of the blood by retained excreta,—we find that the impeded capillary circulation which results from this morbid condition of the blood is often compensated by hypertrophy of the left ventricle of the heart, and the engorgement of the vessels is lessened by serous effusion into the areolar tissue and the cavities of serous membranes, the effused liquids carrying with them, as is shown by chemical analysis, some of the urea which the kidneys are unable to discharge. Both these processes have their *ill* consequences, as well as their good effects. The increased force of the heart's action which accompanies the thickening of its muscular walls, adds to the pressure upon the vessels, which sometimes give way under the strain, and a fatal apoplexy may be the result. Lastly, the evils, often of a most serious kind, which result from an excessive dropsical effusion, are so manifest as to need no further mention.

There is something peculiarly interesting and instructive in this mode of viewing the phenomena of disease. It teaches us, that disease does not imply unmixed disorder, but that, amid all the apparent confusion and contradiction occasioned by a lapse from the state of perfect health, there are manifest evidences of beneficent design, and a continual striving after restoration. It teaches us, too, how essential for the safe and efficient treatment of disease is a knowledge of its nature, its origin, and its tendencies.

I have now described, in some of their features, certain cases of renal disease which are characterised by a desquamation of epithelium from the uriniferous tubes, the primary cause of this pathological phenomenon being, as I have endeavoured to show, a morbid state of the blood; while the final cause, or purpose of it, is the elimination of the noxious materials with which the blood is supposed to be infected. The secreting cells appear to be modified by the passage through them of materials different from those which they naturally secrete, the modification being shown, first, by a change in the appearance of the cells; and, secondly, by their being shed either in an entire form, or in a more or less disintegrated condition, and so being visible in the urine. If these phenomena have been correctly interpreted, it will appear very probable, that the more nearly the desquamated cells resemble the normal epithelium, the more favourable will be the aspect of the case, since it is likely that, in these circumstances, the materials to be excreted do not differ so essentially from the normal renal secretion, but that they may be effectually eliminated by the

modified secretory process to which allusion has been made; whereas, on the contrary, in proportion as the desquamated cells, or the materials which take the place of the epithelium, differ in appearance and structure from the normal secreting cells, the greater will be the danger of serious consequences; for the reason, that a great departure from the normal form of cell growth is an indication, that the materials which are to be eliminated differ in a corresponding degree from the natural constituents of the secretion, and, consequently, it is to be feared that the effort to cast them out will be unsuccessful, while the structure of the kidney may be seriously injured in the attempt. These anticipations are very generally confirmed by the results of actual observation and experience.

Among the most formidable modifications of the secretory process, is that which consists primarily in a substitution of *pus corpuscles* for the normal epithelium of the kidney, and, subsequently, in the extension of the suppurative process to the other tissues of the gland. The results of this form of disease vary much in different cases, according to the nature and intensity of the exciting cause. It frequently happens, that some pus corpuscles are seen among the epithelial cells which are cast off during the progress of acute desquamative disease. It is probable that these are often derived from the mucous membrane of the bladder, the result of the irritation occasioned by the contact of morbid urine. Sometimes, however, they come from the renal tubes, as is evident from their being entangled in the fibrinous casts. In such cases, when the number of pus corpuscles is small as compared with that of the epithelial cells, there would be little reason to fear an unfavourable result. The prognosis, however, is much more alarming when, without any appearance of desquamated epithelium, the urinary sediment is found to be composed of pus corpuscles, partly scattered, and partly in the form of purulent casts of the renal tubes. Although it is probable that cases of this kind are not invariably and necessarily fatal, there is yet much reason to fear an unfavourable result.

One case of the kind, which I had the opportunity of watching, occurred in a man 65 years of age, whose illness had been occasioned by frequent and long-continued exposure to cold and wet. The disease, after continuing for several weeks, terminated fatally. The chief symptoms were diarrhœa and general dropsy, with erysipelatous inflammation of the lower extremities. The urine was scanty, sp. gr. 1017, feebly acid, moderately albuminous, and it had a peculiar rather fetid smell. After standing, it deposited an abundant whitish sediment, composed of cells having all the characters of rather large pus cells, and showing the compound nuclei on the addition of acetic acid. Many of these cells were clustered in the form of cylinders, which had evidently been moulded in the tubes of the kidney; but no connecting fibrinous material was visible. There were many scattered cells of the same kind. Neither epithelium nor blood corpuscles were present. When liquor potassæ was added to the sediment, it became very viscid and stringy. The urine continued to have the same characters, but became more scanty before death.

The kidneys were found to be somewhat increased in size,—one weighed 4¾ ounces. Their texture was rather soft, and they were irregularly mottled by a whitish deposit, occurring in patches. Where the deposit was less abundant, the vessels were congested.

On a microscopical examination, the deposit was found to have the same characters as the sediment which had been observed in the urine. It was composed of pus-cells without an admixture of liquid, so that it did not form abscesses as in a case which I shall presently relate to you. Where the deposit was most abundant there was no appearance of tubular structure, the field being covered by a confused mass of pus cells; but in parts where the deposit was in smaller quantity, the pus was evidently contained in the tubes, which were completely filled by it. In the parts which I just now mentioned as being congested, some tubes were filled with epithelium, and there appeared a gradual transition from this condition to that of other tubes which contained the pus cells.

It is instructive to observe this substitution of the pus cells for the normal epithelium of the tubes; it is also interesting to compare this suppurative disease with the simple desquamative process. In the cases of the latter form of disease, the epithelial deposit or accumulation is always limited by the basement membrane of the tube, which often remains, as we have seen, after the complete disappearance of its epithelial contents. On the contrary, the suppurative disease, although it commences within the tubes, is not limited by them, but it extends through the basement membrane, and soon destroys all traces of tubular structure.

The most rapidly fatal instance of suppurative nephritis which I have met with occurred in a man whose pathological history is more than usually interesting and instructive.

John MacClement, aged 40, a compositor, was admitted into the hospital, under the care of Dr. Todd, on the 11th of December, 1846. He had had much night-work, and his habits had been very intemperate. About four months before his admission his ankles began to swell, and soon afterwards the dropsical swelling became general. On the 15th of December he was reported to be a large, strongly-made man, very pallid, pupils dilated, suffers much from headache; has general dropsy. The urine is pale and limpid, acid, very albuminous, specific gravity 1010. He passes 70 ounces in 24 hours.

He was ordered to have middle diet. To take ten drops of muriated tincture of iron three times a day, an occasional dose of compound jalap powder, and to have a hot-air bath on alternate days. Under this plan, continued with slight variations for more than three months, he gradually gained strength, and his condition was much improved.

One of the most important features of his case was the occasional appearance of carbuncles or large boils about his neck. Thus, on the 17th of December, it was noted that he had a carbuncle on his neck over the sterno-mastoid muscle; says he had a similar affection in the same place about a month ago. The carbuncle was lanced, and soon healed. On the 5th of January he had boils on the right side of the neck under the jaw. These were very troublesome; they were lanced, and on the 23rd of January they were reported as nearly healed. Again, on the 2nd of February, several little carbuncular sores had appeared on the neck; and on the 4th of February they had all coalesced into one sore about twice the size of a crown-piece. This sore was very painful, and was accompanied by rigors and diarrhœa. Before the large sore had healed, another boil appeared over the spine of the left scapula; this was about the 25th of February. On the 25th of March the sores had all healed. On the 30th of March he was reported as still improving.

The urine had been frequently and carefully examined, the albumen had diminished, but in other respects its condition had varied little since his admission. The average quantity was rather above 70 ounces in 24 hours, and the specific gravity 1015. The condition of the urine indicated simple chronic desquamative disease of the kidney. On the 6th April, a few days after the healing of the last carbuncle, I was surprised to find that the urine had undergone a sudden change. To the naked eye its appearance was but little different from that which it had presented on former occasions, but it deposited a light cloudy sediment, which, on a microscopical examination, was found to contain numerous casts of tubes entangling pus cells. A considerable number of pus cells were also scattered over the field of the microscope. The urine was very albuminous, and its specific gravity was 1010. Feeling assured that this sudden appearance of pus in the urine was a sign of serious import, I immediately went to the patient, and questioned him as to the probable cause of the change in his condition. I found that for some days previously he had been allowed to leave the hospital, for the purpose of getting air and exercise, and, after some hesitation, he confessed that he had availed himself of this opportunity to indulge his appetite for intoxicating liquors. He had taken spirits, in addition to about a pint of wine each day. When I told him of my fears for his safety, he seemed surprised at my anxiety, and assured me that he had felt better than he had been at any time since his admission into the hospital. At this time, the only indication of any constitutional disturbance was a confused expression of countenance. He was now ordered to lie in bed. On the 8th April, his intellect was confused, so that he was unable to remember the day of the week; the purulent deposit in the urine was more abundant; he grew rapidly worse. On the 12th, he lay in a stupid, half conscious condition, but said he was better, and had no pain. There was great swelling of the cellular tissue of the neck beneath the jaws, so that he was unable to protrude the tongue. Pulse 100. The urine was acid, high-coloured, specific gravity 1014; albumen very abundant; a copious deposit of pus. On the 13th, small crepitation and a friction sound,

accompanying the respiratory movements, were heard on both sides of the chest. He gradually sank, and died on the night of the 14th, eight days after the first appearance of pus in the urine.

Both kidneys were much enlarged, of a yellowish-white colour, and their substance for the most part firm. In the left kidney there had been extensive suppurative inflammation: two abscesses larger than walnuts had extended to the surface, and there were numerous smaller points of suppuration throughout the cortical substance. The inner surface of the renal vein, on this side, was very red, and had deposits of lymph and pus upon it. The right kidney also had several points of suppuration scattered throughout its substance. All the abscesses, in both kidneys, were surrounded by an intensely red vascular margin, and had evidently been quite recently and rapidly formed.

The liver was large, and contained several abscesses about the size of small peas.

There were many small abscesses in both lungs, and both pleuræ were covered with recently effused lymph.

From the history of this case, it is probable that the form of renal disease under which the patient was suffering until within a few days of his death was, as I have already suggested, simple chronic desquamation. It seems likely, that there was an intimate connexion between the fatal attack of suppurative nephritis and the successive crops of boils and carbuncles which, during several months, had appeared at intervals of a few days in the cellular tissue of the neck.

It is reasonable to suppose, that the carbuncles were the result of an effort to cast out of the body some noxious matters which were continually generated within it, and that, finally, these poisonous materials were sent into the kidneys by the diuretic action of the stimulating drinks, in which the poor man unfortunately indulged at the critical time when, in accordance with the course which the disease had taken during the preceding six months, another set of boils or a carbuncle would shortly have appeared in the neck. The poison appears to have been thus diverted from its original channel into one which speedily led to a fatal result.

It is interesting to observe, that the first indication of the serious change which the renal disease had undergone was derived from a microscopical examination of the urine, and this, too, at a time when there were but slight indications of any constitutional disturbance. The formation of pus in the uriniferous tubes, and the appearance of purulent casts in the urine, were probably the result of an effort to eliminate by this means what I will venture to call the carbuncular poison. The normal epithelium in some of the tubes was replaced by pus, which soon filled the tubes and passed through their walls with a rapidly destructive progress. The renal vein on the left side was involved in the disease, but this was evidently not an essential part of the morbid process, for in the veins of the right kidney there were no appearances of inflammation. It is probable that the inflammation of the vein was as much a secondary result of the disease as was the inflamed condition of the mucous membrane of the pelvis of the kidney. The inflammation of the vein may have been occasioned by the passing onwards into this vessel of the poisonous materials which the excretory effort of the gland-cells had failed to eliminate; or it may have resulted from the extension of the suppurative process from the glandular tissues through the coats of the vessels. The inflammation of the pelvis of the kidney was doubtless excited, as in numerous other instances of renal disease, by the irritant action of the morbid secretions which had passed over its mucous membrane.

That the renal disease was primary seems to be indicated as well by the early appearance of pus in the urine, at a time when there was no indication of disease elsewhere, as by the greater extent and progress of the disease in the kidney. It appears probable, that the suppurative disease in the left renal vein may have been a source of purulent infection, and that the small abscesses in the lungs and liver were consequent upon this. Another explanation which may be suggested is, that the morbid matter which has been assumed to be the primary cause of all the mischief, attacked independently and almost simultaneously, but in different degrees, the kidneys, the liver, and the lungs.

With reference to the assumed existence of a morbid poison as the cause of the carbuncles and of the renal disease, I am induced to support the opinion which I have adopted, by an extract from Sir Benjamin Brodie's "Lectures on Pathology and Surgery." At page 392 of that work, Sir Benjamin says:—"I do not believe a carbuncle to be a mere local affection; it is a constitutional disease, and is always preceded by something wrong in the general health. It seems to me as if there were something like a poison in the circulation, which is thrown out of it into the cellular membrane in cases of carbuncle, so that we might be justified in classing the disease with small-pox and the other exanthemata. In a case of small-pox there is first an attack of fever, which is relieved as soon as the pustules appear; and, as these contain the variolous poison, there is little reason to doubt that it is the expulsion of the poison from the circulation that relieves the fever. The case which I am about to relate seems to indicate that something like this happens in cases of carbuncle. A gentleman, an old acquaintance of mine, formerly a surgeon of eminence in a provincial town, but who had retired from his profession, about 63 or 64 years of age, called upon me some years ago at my own house in the morning, and said he had a complaint in his back, and that he suffered a great deal of pain. On examination, I found that there was a carbuncle. I sent him home, having told him to poultice it. Two or three days afterwards it being, as I supposed, in a proper state for the operation, I made a crucial incision through it. He was very much relieved and was going on well, when there appeared another carbuncle on a smaller scale than the first. It was not a pimple on the skin, but the subcutaneous form of the disease. I told him what I believed to be the case. He said that it did not give him a great deal of pain, and I therefore thought that it would be better to let it advance a little further before I opened it. It went on increasing, the skin over it became purple, and it was assuming the ordinary appearance of carbuncle. In the meantime he continued well in health, and appeared, indeed, to have scarcely any ailment except the local complaint. But a day or two afterwards on calling upon him, and believing that it would now be right to incise the tumour, I found him in bed. On inquiring the cause, he said, in a faint voice, "Oh! my dear friend, I am dying." I expressed a hope that that was not the case. "Oh! yes, said he; I am dying." I found that, indeed, his words were true. His skin was cold and clammy, and his pulse scarcely perceptible. I asked him how long he had been in that state. His answer was, "During the night all the pain subsided, and at the same time I became ill. I believe the carbuncle itself has disappeared." And so it had. When I examined the back, I could find scarcely a vestige of it. He died in less than twenty-four hours after this change had taken place. He adds: "Another circumstance is worthy of notice, as confirming the view which I have taken of the pathology of this disease. It frequently happens, when a patient has recovered from a large carbuncle, that other smaller ones like boils appear on different parts of his body; and a succession of these, gradually becoming smaller and smaller, may continue for many months, or even for one or two years."

In giving so full a history as I have done of the case of MacClement, and in supporting the explanation which I have offered of the pathology of the disease, by the quotation from Sir B. Brodie, I have been influenced by a wish to confirm and illustrate one of the general propositions which I announced in my first lecture, viz., that "diseases of the kidney have their origin in a morbid condition of the blood." The evidence of this condition varies in different cases; it never perhaps amounts to an absolute demonstration, but often, as in the case of MacClement, and in the case so graphically described by Sir B. Brodie, it is in the highest degree probable, and, in fact, morally certain. Perhaps, after all, the best evidence of the blood being in a morbid condition is derived from a study of the various pathological changes in the kidneys themselves. Let the morbid state of the blood be assumed as a central fact, and all the phenomena of renal diseases arrange themselves round it in an orderly manner.

Absolute certainty is not attainable by the pathologist in many of the most important questions with which he is concerned, nor ought he to refuse his assent to doctrines based upon such *probable evidence* as is reasonably conclusive. The evidence which we have of the existence of the marsh malarious poison, or indeed of any other morbid poison, is only probable. Yet no pathologist could reasonably refuse assent to the doctrine; nor would it be easy to explain all the phenomena of ague in any other way than upon the assumed existence of a malarious poison. And if we are tempted to think that there is something humiliating in this

confession of our ignorance, we may console ourselves by the reflection, that, possibly, a more exact knowledge of the nature of malaria might not be available for any practical purpose, that it would neither remove the mystery from the curative influence of quinine, nor suggest any new remedies; and we may be thankful that such means, both of prevention and of cure, as we have at our disposal, are so really efficient as they are.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

MIDDLESEX HOSPITAL.

By S. W. SIBLEY, Esq.,
One of the House Surgeons.

DISLOCATION OF THE STERNAL END OF THE CLAVICLE BACKWARDS.

Of the dislocations of the clavicle, perhaps the most interesting is that of the sternal end of the bone backwards, inasmuch as that dislocation only is attended by symptoms of a serious or distressing nature, and, further, because the rarity of the accident prevented it, till within the last few years, from holding an acknowledged place among the dislocations of the clavicle. Now, however, many cases have been recorded; but the symptoms with which the dislocation has been attended in these cases are by no means constant, and this has caused Pellieux to divide the dislocation backward into a superficial and a deep variety. The division certainly appears to be just; for it is but fair to suppose that the severity of the symptoms would depend on whether the clavicle, with its portion of the sterno-cleido-mastoid, is behind the sternal part of the same muscle or behind the sternum itself, for, in the latter case, the pressure on the parts behind would be much greater.

Mary C., an Irish girl, aged 10, was admitted into the hospital March 10, under the care of Mr. de Morgan. She is of slim make, and of somewhat stunted growth. It appears that, while playing in the street with some other girls, a carriage driving rapidly by at the time knocked her down; but it is stated by those who saw the accident, that the wheels did not pass over her. At the time of admission was much collapsed; face pale; skin cool, with slight rigors; suffering from great dyspnœa; respiration anxious, 44; pulse 100, feeble. The head is drawn down on the chest, and there is extreme pain when it is raised. On exposing the chest, there is seen considerable tumefaction over the right coracoid process and about the external half of the right clavicle, with some bruising of the integument. The inner end of the left clavicle may be seen distinctly projecting beneath the skin, but, in place of a similar projection on the right side, there is a depression, into which the finger may be thrust, and the clavicular articulation of the sternum felt; this, however, causing great pain and increased dyspnœa. Behind this notch in the sternum the clavicle may be felt, so that the inner end of the bone lies behind the sternum. There is a difference in measurement from the middle line to the acromion of a quarter of an inch in favour of the left side; there is also considerable bruising over the right side of the lower jaw, a slight cut over the right ear, with a more severe one over the left, and a severe laceration of the left little finger.

On placing the knee against her spine, and gently drawing the two shoulders backwards, the bone is easily restored to its proper place, causing obvious relief to the dyspnœa; but immediately on leaving hold of the shoulders, the bone falls back, and the dyspnœa returns. A splint was then placed across the shoulders, with a pad between it and the spine, the shoulders being drawn to the splint by a bandage. By this means, the bone was kept firmly in its place; pillows were so arranged along the child's back that the splint should not feel uncomfortable. On the apparatus being fixed, she could lean her head backwards, and stated that her pain was much relieved.

On the next day, 21st, she had passed a quiet night, breathing somewhat anxious, but under 40; pulse 108, moderately full. Has coughed very much during the night, but states she has been subject to cough for some time, there being rhonchus and large crepitation all over the front of the chest. The apparatus required to be re-adjusted. She was ordered to take some opening medicine, to have a squill draught, and to remain on low diet.

On the 25th, the inner end of the right clavicle was fully as prominent as that of the left. The end of the bone, however, is quite moveable. Respiration tranquil; has still a slight cough.

She continued to wear a splint till a fortnight after the accident; the bone then feeling quite firm in its place, she was allowed to be in bed without any bandage. The articulation is now (April 7th) quite as firm as that on the other side; she has no pain when she moves the right arm about.

As to the manner in which the dislocation was produced, there seems to be but little doubt that it must have been the tread of one of the horses forcing the bone backwards; but it still remains unexplained, why a force applied to the middle of the bone sufficient to dislocate the sternal end should not have caused fracture. The treatment of the case, it is seen, was not attended by any difficulty, the end of the bone easily returning to its place, but, without the apparatus described, as quickly returning to its former situation; and this is no more than we should expect in such a joint as that of the sternum and clavicle, more especially when the parts forming it are in the lax condition natural to childhood.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

GENERAL HOSPITAL, BRISTOL.

By W. MICHELL CLARKE, Esq.
House-Surgeon.

RUPTURED URETHRA.

The following case is one which I promised to report when I sent my last. In it this case was twice or three times referred to. It further illustrates the treatment that was adopted in the two cases before reported; and I think it will serve to demonstrate, that catheters made of gutta percha are peculiarly useful in such cases.

John Fry, aged 9, admitted August 9, 1851, under the care of Mr. Godfrey.

1 p.m.—He had fallen from a ladder, pitching with his perinæum on a box. The only apparent mischief, at present, is some œdema of the scrotum.

Fotus perineo. Ol. ricini ʒss., s. s. et rep. 6 p.m.—Si op. sit.

20th, 9 a.m.—He has passed no urine; the skin over the perinæum is turning dark; the scrotum is very swollen and œdematous; it is not altered in colour.

An attempt was now made to pass a catheter; it did not go into the bladder.

5 p.m.—The mischief has gradually increased. He was now taken into the operation-room, and put under the influence of chloroform. A careful dissection was made through the perinæum to the ruptured urethra. The orifice nearest the bladder was found to be just in front of the triangular ligament. Through the wound an elastic catheter was introduced to the bladder, and an abundance of urine drawn off by it.

Lastly, a catheter of gutta-percha was passed through the meatus urinarius to the wound doubled upon itself, and the elastic catheter having been withdrawn, the other was passed on to the bladder and fastened in. During the operation there was considerable hæmorrhage. A compress easily arrested it. He passed a stool during the operation.

9 p.m.—Is very comfortable, and inclined to sleep. There has been no further bleeding. To have some arrowroot through the night.

21st, 9½ a.m.—Has been very noisy all night, talking out. Says that he is much better; skin hot and moist; pulse 124; full and sharp, but easily compressed; not thirsty; bowels not moved. His urine has been drawn off three times during the night. It runs freely through the catheter.

The swelling of the scrotum is very much diminished. The wound looks dark.

Low diet, with one pint milk and arrowroot daily; gruel and bread.

22nd.—Has had a good night; his general condition is much the same as it was yesterday; bowels have not moved: plenty of urine runs through the catheter; the scrotum is much smaller, and the colour is more natural; the wound is beginning to suppurate.

Rags wrung out of warm water are kept to it.

Hydr. cum cret. gr. i., pulv. rhei gr. ii., mag. carb. gr. vi. Ft. pulv. s. s. Ol. ricini ʒss., vespere si op. sit.

Pt. dicta.

23rd.—Has been restless and noisy through the night; has been endeavouring to draw out the catheter. His general condition remains much the same, but his appetite improves; bowels moved twice; the urine does not run freely through the catheter. The bladder was washed out with warm water injected through the catheter by means of a syringe.

24th.—Was obliged to have his hands tied to prevent his meddling with the catheter. The urine does not run well through it.

26th.—During the past night has been in a good deal of pain, but says that he feels easier this morning. Skin warm and moist; pulse 104, small and soft; tongue moist, almost clean, rather red towards the tip; not thirsty; appetite pretty good; bowels not moved since the 23rd.

The catheter is quite choked, and all his urine comes through the wound; it does not pass away readily.

The wound looks unhealthy, and the discharge is thin and ill-looking.

The catheter was changed. One of gutta percha was introduced, having a hole in its vesical end, that it might be removed and another introduced over "Wakley's index-rod," if practicable. It was introduced by keeping the finger upon the further orifice of the ruptured urethra, to serve for a guide.

On the 27th, the urine came freely through the catheter. He was ordered house diet (meat and potatoes).

Sept. 1.—Is doing very well; the wound is becoming more healthy in appearance; the catheter has not required changing.

℞ Acid. nitric. et hydrochlor. aa. mi., aq. ʒi. Ft. hst. quater quotidie sumend.

Sept. 9.—On this day the catheter required changing. It had discharged but imperfectly for two or three days, and most of the urine was coming through the wound. An attempt was made to use "Wakley's index-rod," but it could not be made to reach the bladder through the catheter. A director was passed through the wound into the bladder, and served for a guide to the catheter.

On Sept. 13th I went into the country, and was away from this place for nearly a month. On my return, I found that the catheter had never been changed, the urine having continued to run freely through it during all that time. He had continued his mixture. The wound was almost healed, a fistula only remaining.

The same catheter was allowed to remain in the bladder all the time, which was six weeks from its first introduction. When removed, it was quite as good as when new. An attempt was made, previous to its removal, to introduce "Wakley's index-rod" through it, there having been a hole made in the end for that purpose. It could not be made to pass. The catheter was not much coated; not so much as I have seen an elastic-gum catheter coated after remaining two or three days in the bladder.

What coating there was was quite white and very firm; indeed, as hard as a uric-acid calculus. There was not much trouble in withdrawing it; but, being a troublesome boy, he inhaled chloroform for its withdrawal. For two or three days after, he took a mixture of tinct. hyoscy. and potass. bicarb. After this, a catheter was occasionally introduced, and he improved gradually until Nov. 26, when he was discharged. At this time his stream of urine was very good, and the fistula was quite closed. Once since he has suffered retention due to spasm, but otherwise has been quite well. At the present time (March 12, 1852,) he continues perfectly well, and passes as large a stream of urine as he ever did. No catheter has been passed for a month.

The progress of this case illustrates well the benefit of introducing a catheter at the very commencement of the treatment, even though an operation of considerable difficulty and some danger be required in order to effect the introduction. The advantages derived from this proceeding were pointed out in a former report (*Medical Times*, Dec. 20, 1852). Equally advantageous is it to keep the catheter in the bladder as long as possible, that the ruptured portion of the urethra may be moulded upon it; the more frequently the catheter is changed, the more is this restoration interfered with, and delay and risk result to the patient. Until the restoration approaches to its completion, I do not think that the occasional or daily introduction of a catheter will be found nearly so serviceable as its constant retention in the bladder, and that for reasons mentioned in the previous report. In order to the carrying out this object, I think that the substitution of catheters of gutta percha for those of gum-elastic will be found particularly useful, for the following reasons:—

1. Gutta percha is acted upon by so few agents; the urine has no effect upon it; and a catheter, after remaining in the bladder for six weeks, comes out uninjured. Before they were used, it was suggested to me that the temperature of the urine and bladder would injuriously soften the gutta percha. But the heat is not sufficiently high, and the material is not at all affected by it. Acids may be freely injected through these catheters.

2. They do not cause so much irritation of the bladder and urethra as other catheters, whether these be of metal or gum-elastic; indeed, they seem to cause no inconvenience.

3. Owing to their durability, they require changing much less frequently than the gum-elastic. I know of no rule as to the time that it is safe to allow a gum-elastic to remain in the bladder; but the longest time that I have known one left in has been three weeks. I consider that too long to be safe; the catheter was thoroughly spoiled, though it came out entire. The patient subsequently had to undergo lithotomy. I think it very probable that the nucleus of the calculus was derived from this catheter. Perhaps four days is as long as it would be safe to allow a gum-elastic catheter to remain in the bladder. It will, however, always depend very much upon the acidity of the urine, and will vary accordingly. A catheter of gutta percha is free from most of the objections to a gum-elastic, and I think may safely be left to remain in the bladder as long as the stream of urine continues to be free through it. It will never be acted upon by the urine, and any calculous deposit that may take place upon it will become harder and more firmly fixed upon the catheter by remaining some time, and therefore less liable to be knocked off. The longest time that I have known one remain in was in the case now reported (six weeks).

No injury of any kind resulted from such long retention; on the contrary, great good. When removed, it was quite perfect and smooth, except at the vesical end, where it was coated with a white deposit. This deposit was hard, smooth, and evidently unbroken. A catheter of gum-elastic, after remaining in for three weeks, was destroyed—rough and uneven, and much coated at the vesical third of its length, with a soft, white deposit; at least soft in comparison with that on the catheter of gutta percha.

The price of the catheter of gutta percha is the same as that of gum elastic. Owing to its durability, it is much more economical than the gum-elastic.

A catheter of gutta percha retains any curve which may be given it (by softening before a fire) with admirable obstinacy. The value of this property is obvious. It possesses rather but not much more stiffness than gum-elastic.

Those I have hitherto been able to obtain have been very badly and roughly made. They require a little paring at the hole in the vesical extremity.

P.S.—The man Jones, whose case was reported in the *Medical Times* of December 20, 1852, remains perfectly well, and follows his occupation. For more information about catheters of gutta percha, I may refer to his case.

THE PARISIAN PRACTICE OF MEDICINE AND SURGERY.

HOSPITAL LA CHARITÉ.

By F. W. PAVY, Esq.

PROFUSE BLOODLETTING IN ACUTE ARTICULAR RHEUMATISM.

The employment of bloodletting in acute rheumatism is a practice which in itself presents no novelty, having been long since established, and at the present day being recommended by many British as well as Continental physicians. Few or none, however, carry it to the extent that it is advocated by M. Bouillaud, at La Charité, who has adopted venesection as his sheet-anchor in the treatment of this as in all other acute febrile and inflammatory affections. The following cases, therefore, are of interest and importance, notwithstanding that they belong to a disease of such common and frequent occurrence as acute rheumatism. A patient admitted into M. Bouillaud's wards, labouring under a febrile or inflammatory complaint, is at once bled, and bled largely and repeatedly, until some marked effect is produced, either that of relieving the symptoms of the disease, or of altering the inflammatory appearance of the blood. This inflammatory appearance of the blood is frequently employed by him as an important diagnostic sign of some latent inflammatory affection, whose presence was but equivocally indicated by its other symptoms—some cases of latent pneumonia, for example. It is hence regarded as an indication for the further abstraction of blood, until this fluid no longer present an inflammatory appearance, or until relief be obtained. Indeed, it is no uncommon occurrence in these wards to see a patient bled four or even five times during the twenty-four hours, each time to the extent of about fifteen ounces, and venesection still ordered to be repeated if the symptoms remain unsubdued. The usual but not constant effects observed, are an immediate relief of all urgent symptoms; but the patient is reduced to an anæmiated condition, with a small feeble pulse, a pallid face, and a general debility, extremely favourable, especially in the wards of an hospital, where every class of disease is admitted, for the contraction of other complaints which may prove more serious than the original, and under which, in fact, the patient may succumb,—a sequence of events, unhappily, but too truly illustrated in one of the cases we

have selected. It is remarkable, however, the amount of bleeding some patients will sustain without manifesting any prejudicial influence.

Acute Rheumatism with Pericardial Complication — Large Bloodletting—Almost Immediate Recovery.—Caron Emile, aged 17, admitted into La Charité, under the care of M. Bouillaud, February 25th, 1852; a lad of a spare frame, and somewhat delicate appearance. About five days previous to admission was seized with symptoms of rheumatism, affecting first the feet, and afterwards ascending to the knees and other larger joints, which became hot, swollen, and painful, to a degree completely to disable him. Accompanying these local symptoms, there were an accelerated pulse, a hot skin, in fact, considerable febrile disturbance, with a pericardial *frottement*, audible over the base of the heart. On the evening of his entrance into the hospital, he was bled to fourteen ounces. The blood presented a highly inflammatory character, the clot being buffed, cupped, and strongly contracted.

Feb. 26th.—At the ordinary visit of the morning, the patient's symptoms were scarcely altered from those he presented on admission. He was accordingly ordered venesection to fifteen ounces immediately, and to be repeated during the day, with cupping to the same extent over the region of the heart, and a dose of opium at night. The inflammatory appearance of the blood diminished at each bleeding, the clot of that drawn by the last venesection being scattered and not retracted, but remaining of a bright red colour.

27th.—Patient very much relieved, almost entirely free from pain, and bearing no remaining evidence of any pericardial affection.

March 1st.—May be looked upon as convalescent as regards his rheumatism, having no pain or swelling of the joints, or febrile disturbance, but presenting a pallid aspect, with an evidence of much muscular debility. His condition continuing favourable till March 9th, he was discharged, bearing no remaining perceptible traces of his previous rheumatic affection.

Acute Articular Rheumatism—Free Bloodletting—Rapid Relief, succeeded by Great Prostration, Erysipelas, Gangrene of the Lower Extremity, and Death.—Louise Martin, aged 15, a fine, healthy, robust, florid-faced, full-grown girl, occupied as a seamstress, and received into M. Bouillaud's wards at La Charité, February 8th, 1852, labouring under an attack of acute arthritic rheumatism, with which she had been seized a few days previously. The symptoms she presented were of a severe and sthenic nature, and, independently of the general febrile disturbance, which was considerable, were located principally in the larger joints, the shoulders and knees, but more especially the left knee, which was hot, exquisitely sensitive, and much more swollen than the other. Concomitant with these general and arthritic symptoms, there was a pericardial affection revealed by a *bruit de frottement* audible over the base of the heart. The treatment consisted in venesection to fifteen ounces, repeated three times during the first twenty-four hours of her admission, combined with the application of twenty leeches to the left knee, and the administration of a dose of the extract of opium at night. A blister was afterwards applied to the knee, and succeeded in a few days by compression by means of a bandage, and the opium at night was continued in conjunction with an edulcorated tisane during the day. Under these measures our patient sensibly and rapidly improved; her febrile symptoms subsided, her pulse diminished in fulness and frequency, her pain and suffering abated, her *bruit de frottement péricardique* vanished, and her knee became reduced to its ordinary dimensions. On February 18th, in fact, ten days after her admission, it was remarked that she might be regarded as in a perfectly convalescent condition; and her case was cited as a good illustration of the efficacy of free bloodletting in acute rheumatism, and its superiority even over all other modes of treatment. Notwithstanding these favourable indications, however, there were also others bearing an aspect of a less propitious nature, for she remained weak and prostrate, and her cheeks had entirely lost that healthy blush which originally and naturally belonged to them.

Feb. 23rd.—Was considerably agitated and excited this morning, and complained of tenderness of the lower part of her back, on which she constantly lay, and on which there was to be seen a slight superficial redness over the sacral region, presenting the appearance of a commencing bed-sore.

25th.—A most marked change during the last forty-eight hours, from a condition regarded as one of almost convalescence to one of as equally almost entire hopelessness. Pulse quick (over 120), small, and disappearing under the slightest pressure; face extremely pallid, and presenting also a somewhat icteroid tinge; severe and frequent rigors; extreme sensibility to the slightest movement; extensive superficial redness, with subjacent swelling, reaching from the sacrum over the gluteal region and outer side of left thigh nearly to the knee, the bandage surrounding which was ordered to be removed.

26th.—Pulse 150, feeble and fluttering; tongue moist and white; mind inclined to ramble; erysipelas extending, accompanied with much swelling, and presenting a colour of a dark, unhealthy aspect.

27th.—Features sharp, and stamped with a cadaverous aspect; the whole of the left lower extremity, but most especially the thigh, much swollen, mottled of a dark blue colour, and emitting an offensive and decidedly gangrenous odour; abdomen tympanitic; occasional delirium. 8 p.m.—Expired. No autopsy permitted by the friends.

Remarks.—Of the two preceding cases, the first appears an unquestionable illustration of an ordinarily severe attack of acute rheumatism, complicated with a distinct pericardial affection, cut short in the course of a few hours by the free abstraction of blood, combined only with the administration of opium at night, which cannot be regarded as playing more than the part of an adjunct, for the purpose of relieving pain and procuring sleep. This case is not a mere casual or exceptional one, but, on the contrary, belongs to a general rule observed in M. Bouillaud's wards, that under the heroic use of bloodletting. Bloodletting resorted to immediately, and employed freely, boldly, and without hesitation, acute rheumatism seldom resists beyond a few days; and, if not then entirely subdued, is most materially mitigated or relieved. The second case, which was characterised by its extreme severity on admission, is also an example of the rapid relief accruing from free bloodletting in this disease; but it unhappily does not stop short here, for no unbiassed or unprejudiced mind can for a moment doubt that the anæmiated and debilitated condition of the patient, resulting from the treatment adopted, mainly contributed to her untimely end. Acute rheumatism is not in itself a fatal disease, neither can we regard it in this instance, except in its course of antecedence or priority in the sequence of events, as having been the cause of the termination which resulted.

SCIENTIFIC LECTURES.

HUNTERIAN LECTURES ON THE ANATOMY OF INVERTEBRATE ANIMALS.

BY RICHARD OWEN, F.R.S.,
Hunterian Professor to the College.

THIS EVENING, APRIL 24.—Lecture XVIII.—*Insecta.* Principles on which the Articulata with jointed limbs and tracheæ are classified: primary division according to the number of the segments of the chitinous skeleton: subdivision of the Myriapoda and Hexapoda. Composition of the skeleton and its appendages; orders of Hexapod Insects according to the structure of the wings. Modifications of the nervous system: organs of sense; antennæ, palpi. Structure of the mouth in Haustellate and Mandibulate Insects. Examples of the manifold modifications of the alimentary canal. Salivary, biliary, and urinary glands. Circulating and respiratory systems.

TUESDAY, APRIL 27.—Lecture XIX.—*Generation of Insects.* All Insects diœcious. Generative system of the Myriapoda. Vesicular testes and ladder-like anastomoses of the two vasa deferentia in the Iulidæ: advanced position of termination of sperm-ducts. Male organs of Centipede. The single ovarium with single oviduct in Centipedes, and the two oviducts in Iulus. Spermathecæ and colleteria. Hexapod larvæ and their metamorphoses by multiplication of segments and joints. Business of generation in Hexapod or "True" Insects committed to four kinds of individuals,—Males, Females, Neuters or nursing-females, and procreant virgin larvæ. General structure of the male organs. Analogy of the testes in their numerous and various forms and occasional bright colours to flowers. Monogamy or Polygamy in Insects governed by the structure of the intromittent organ. External outlets of sperm-ducts remote from that of the vesiculæ seminales and from the penis in the Dragon-fly. General characters of the female organs: exceptional simplicity of those of the procreant larval Aphides. Modifications of the vulva, and its appendages the ovipositor and sting. Various uses and applications of the colleterial secretion. External sexual characters. Abnormal Hermaphroditism. Development of the ova, and their various forms and appendages. Cocoons and other nidi. Oviparous, larviparous and pupiparous insects. Striking evidence of design in the instincts of oviposition. Development of the embryo: various grades of this at which it quits the ovum. The metamorphoses of insects: the larva, pupa, chrysalis, or aurelia. The imago. True character of these defined stages and varieties. Metamorphosis a course of development alike in its essentials, with its stages varied as to time and place: all insects at first vermiform: larval types of Entozoa, Earth-worms, Nereids, Myriapods, and Crabs. Metamorphosis and development of organs in Lepidoptera.

THURSDAY, APRIL 29.—Lecture XX.—*Arachnida.* Characters of the class and of its chief divisions. The Cephalothorax and abdomen. Nature of the four pairs of legs. Maxillæ and modified antennæ and nervous system. Ocelli. Narrow œsophagus and sacculated stomach; intestine; cæcum, biliary and urinary glands. Relation of gastric cæca to long endurance of abstinence. Heart: vascular and respiratory systems. Secreting organs of the prism and of the web. Male organs of Spiders: termination of sperm-ducts remotely from the vesiculæ seminales: transfer of these sacs and the intromittent organ to the end of the cephalic palpi. Tubular testes of Scorpions and their anastomoses: short sperm-duct and long cæcal sperm-sacs: papilliform penis. Pectinate appendages. Long ovaria and short oviducts of Spiders: spermatheca and modi-

fications of vulva. Female organs of Scorpions: developmental pouches of the viviparous species. Coitus and oviposition of Spiders: their strong maternal instincts: silken and other nests. Development of germ and embryo: early manifestation of the class-character.

Saturday, May 1.—Lecture XXI.—*Mollusca Acephala.* Characters of the Tunicata, Brachiopoda and Lamellibranchiata; their organisation respectively exemplified by that of the Ascidian, the Terebratula and the Oyster. Structure and relations of the bivalve shell. Muscular system. Nervous system and organs of sense. Stomach and triturating style. Vascular and respiratory systems. Inhalant and exhalant syphons. Modifications of these and of the shell-valves in the Ship-borer (Teredo.) Relations of the compound Ascidians to Polypes, and their propagation by gemmation as well as ova. Generative organs of dicœcious Ascidiæ. Development and metamorphosis of Ascidians. "Alternate generation" of viviparous Salpæ. Dicœcious condition the rule in lamellibranchiate bivalves. Male and female organs bulky but simple: short sperm-duct of males, short oviduct of females: no glandular appendages, and no intromittent organ. Modifications of gills to form marsupial pouches. Development of germ: rotation of ciliated embryo. Metamorphosis of "Glochidium" and other larval forms of bivalves: final purpose of the deciduous byssus.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening,	April 24.	—Royal Institution. *Subject:* — Professor Faraday, "On Points Connected with the Non-Metallic Elements." Three o'Clock.
——	——	Medical Society of London. *Subject:*—Mr. Pilcher, "On Metastasis." Eight o'Clock.
Monday,	April	26.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock
Tuesday,	April	27.—Royal Institution. *Subject:* — E. Lankester, M.D., "On the Physiology of Plants." Three o'Clock.
——	——	Royal Medical and Chirurgical Society. Half-past Eight o'Clock.
Wednesday,	April	28.—Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock.
——	——	Hunterian Society. Eight o'Clock.
Thursday,	April	29.—Royal Institution. *Subject:* — R. Westmacott, Esq., R.A., "On the History and Practice of Sculpture." Three o'Clock.
Friday,	April	30.—Royal Institution. *Subject*:—Mr. Huxley, "On Animal Individuality." Half-past Eight o'Clock.
Saturday,	May	1.—Royal Institution. *Annual Meeting of the Members.*
——	——	Medical Society of London. Eight o'Clock.

Medical Times & Gazette.

SATURDAY, APRIL 24.

MR. PASCOE'S CASE.

Ma. Moorman's letter, which appears in another column, does not require any comment. While we willingly admit that this gentleman has acted conscientiously, and to the best of his judgment, we regret, that in so important a matter, he did not consult other authorities besides those he names. The very valuable letters we publish on the same subject from various able Correspondents, bring a mass of evidence to bear on the point, which cannot fail to satisfy both the Secretary of State, and the Judge (Erle) who presided, that the medical evidence given on the trial must be set aside.

On again carefully considering the entire evidence in this case, we cannot but feel the greatest astonishment that, even accepting Mr. Moorman's evidence, so able a Judge as the one who presided should not have sifted the case further. Is there any reason for this? It appears from Mr. Moorman's letter, that Mr. Pascoe has been tried for manslaughter. In passing judgment, also, the Judge (according to one report) made a statement, which, considering that there was nothing whatever to warrant it, in what had gone before, surprised us greatly. The Judge is reported to have said, that it was probable this was not the first time the prisoner had been guilty of a similar offence. Mr. Pascoe, we observed, also, called no witnesses as to character.

It is possible that, from circumstances with which we are unacquainted, there may have been a prejudice against Mr. Pascoe, which led the jury to conclude easily as to his guilt, and the judge to concur in this verdict. But with this we have nothing to do; we take the case as it stands, and, supposing that we have all the facts before us, we have no hesitation in stating, that the evidence tendered is insufficient to warrant the verdict.

The whole case will be amply investigated. The Judge is well known to be one of the most careful and conscientious men on the bench, and he will no doubt at once re-consider the evidence. We have reason to know, also, that our remarks have attracted notice in a quarter where no appeal for justice falls unheeded, and that Mr. Pascoe will not leave this country in a felon's garb, unless the verdict which has been recorded be warranted by a new investigation.

"THE SOULS OF THE SICK."

In a pamphlet entitled, "The Souls of the Sick,—a Letter addressed to Sir Robert Inglis, Bart., and the Governors of St. Bartholomew's Hospital;" written, we regret to say, by a member of the Profession, is an attack upon the conduct of two estimable gentlemen, clergymen of the Established Church, viz., the Hospitaller and Assistant-Hospitaller of St. Bartholomew's Hospital.

We notice it especially in this place, because one of the subjects touched upon is of considerable importance to the community at large.

It is not customary in the Nineteenth Century, to regard the souls of the Roman Catholic portion of Her Majesty's subjects as "sin-steeped and sin-directed;" and we presume the authorities of a large charitable trust would adopt very stringent measures to prevent their sphere of usefulness being limited by a spirit of bigotry. It is the pride of the present age, in reference to public hospitals, or the public services, that Protestant, Catholic, and Episcopalian, Presbyterian, and Dissenter, can sit at the same board, dwell under the same roof, and work for the same end in harmony and peace, each respecting and loving his neighbour. There will be firebrands and evil-doers in every community; but the general good sense will keep such culprits in their proper places.

We have heard that there exists an organized system of attack upon the Chaplains attached to public hospitals, on the ground, that they refuse *to proselytise* or to permit the introduction of such a system by others. If this be their *offence*, they merit the grateful thanks of the community that they have taken so high a position. The parent may leave her child, assured that no unfair advantage will be taken to shake its belief in the associations and the religion of its home. Men of all denominations know well, that their moments of anguish, or the hour of death, will not be imbittered by controversial divinity. Each patient has the benefit of the attendance of his own minister, unless he choose to avail himself of the services of the Chaplain, who in his daily visit to the wards solicits unobtrusively, yet earnestly, that they who are in distress will confide to him their woes. We should be sorry to believe that Mr. Hewer's opinions could affect the healthfulness of this system.

VALUABLE PUBLIC APPOINTMENTS.

The following advertisement may possess attractions to gentlemen of considerable independent property; especially as St. Mary's Hospital is situated in a fashionable part of

town, and is accessible by a pleasant drive round Hyde-park or a refreshing walk through Kensington-gardens. The officers of this Institution might, perhaps, prefer a Member of Parliament to undertake the posts they offer; the duties of watching cases uninterruptedly from day to day, and of noting the morbid appearances observed after death, being a light recreation, sufficiently agreeable to render men willing to undertake it *as honorary* :—

"St. Mary's Hospital.—A Medical and a Surgical Registrar are required for this Hospital. The offices are honorary, and the duties may be known by personal application to the Secretary, at the Hospital. "S. Shepherd, Secretary.

"Board-room, April 5, 1852."

The medical and surgical officers would have done themselves infinitely more credit, had they subscribed to pay the Registrar 100*l.* a year for conferring upon them so important a service as that of recording their cases for their own use. "A Medical and Surgical Registrar required at this Hospital; salary, 100*l.* a year, with board and lodging." Would not this have been more respectable from the authorities of a large public institution? We think so,—with the conviction, that the system of sucking the brains of the young without payment is derogatory to the high character of the medical staff of St. Mary's. The offer is positively shabby and discreditable; and we trust that it is a mistake soon to be corrected. As for ourselves, we would rather walk a thousand miles in a thousand hours, than pursue for *others*, without fee or reward, the varying characters of disease from day to day, without intermission, from their commencement to their termination. But, in these revolutionary days, society may be quite upset; and it would not surprise us were the next advertisement to be, "Acute Medical Cases and Surgical Operations required for this Hospital. Patients will be liberally paid, and the nature of the treatment may be known by personal application to the Secretary, at the Hospital. Board-room, April 1st."

ABSTRACT OF THE PROPOSED NEW CHARTER OF THE COLLEGE OF PHYSICIANS.

The preamble repeals former Acts and Charters, except such portions of the 32nd of Henry VIII. as may be consistent with the proposed Charter.

Clause I. Alters the title, from Royal College of Physicians of London, to Royal College of Physicians of England.

II. Provides for constitution of College, viz., fellow and members, including president and council, four vice-presidents, four censors, a treasurer, and a registrar.

III. All present licentiates to be members.

IV. All present extra-licentiates to be members, on presenting satisfactory testimonials of character, and on paying a fee of 15*l.* 15*s.*, exclusive of stamp-duty.

V. All persons, graduates of recognised Universities, practising as physicians, (and who have practised for three months previous to granting of charter,) and who do not practise pharmacy, to be members, without examination, on presenting testimonials and paying fees, any time within twelve months after granting of Charter.

VI. Graduates of recognised Universities, aged 26, to be subsequently admitted as members by examination.

VII. The present Fellows to continue Fellows.

VIII. Any member, of four years' standing, to be admitted a Fellow by examination.

IX. During twelve months after granting of charter, the Council may nominate, at discretion, any number of present members, without regard to the date of membership, to be Fellows.

X. After the twelve months aforesaid, the Council may yearly nominate, at discretion, members of four years' standing to be Fellows.

XI. Fellows to be elected by ballot, annually, on June 25.

XII. Provides for the expulsion of Fellows or members guilty of fraud, or imposition, or of violating by-laws, etc.

XIII. The presidentship to be annual; the present President to continue to be president till the day next after Palm-Sunday, and then to be capable of re-election.

XIV. On said day, the Council propose a Fellow from among the first fifty as president, to be elected by ballot, by a majority of the Fellows; if not received by the Fellows, a second nominee to be proposed by the Council from among the first fifty, and so on.

XV. On death of President, a new president to be at once elected, a vice-president officiating *pro tempore*.

XVI. The President to appoint four Fellows from among the first fifty as vice-presidents.

XVII. On death of President, the Vice-Presidents cease to be Vice-Presidents.

XVIII. The Council to be composed of sixteen Fellows.

XIX. Four of the Council to retire annually, and to be in capable of re-election for one year.

XX. The Council to be elected by the Fellows, in a method provided by the by-laws.

XXI. The President, Censors, and Treasurer, to be *ex officio* members of Council.

XXII. The Censors to be annually elected.

XXIII. The Council to nominate Censors, to be proposed to the Fellows, to be elected by ballot. If any proposed Censor be not elected, another Fellow to be proposed by the Council, etc.

XXIV. On death of Censor, a new Censor to be at once elected.

XXV. Treasurer to be annually elected, and to be eligible for re-election.

XXVI. In case of death of Treasurer, a new one to be at once elected.

XXVII. The Registrar to be annually elected, and to be proposed by the President to the Fellows. The retiring Registrar to be capable of re-election.

XXVIII. A new Registrar to be at once appointed in case of death.

XXIX. All the officers retain office during the day on which their successors are elected.

XXX. The days of election may be changed by by-law.

XXXI. No proxies allowed.

Subsequently it is provided :—

1 That the duties, powers, and privileges of the said offices be in future as they now are.

2. That the College may admit any person, aged forty years, after satisfactory examination, to be a member, and *to have and use the title of Doctor of Medicine*.

3. Powers are given to hold and inherit property, etc.

Clauses V. and VI. are drawn under the supposition, that the Legislature will in future, without interfering with existing rights, render it imperative on all physicians practising in England and Wales to be enrolled in the College of Physicians of England.

REVIEWS.

On Syphilis, Constitutional and Hereditary; and on Syphilitic Eruptions. By Erasmus Wilson, F.R.S. London: John Churchill, Princes-street. 1852.

Mr. Erasmus Wilson is well known as an honest and upright man, an earnest pathologist, an agreeable writer, the author of a standard work on Cutaneous Diseases; and of what, from the excellence of its pictorial, may be termed a national work,—"Portraits of Skin Diseases." We need therefore scarcely say, that his book on Syphilis commands attention. It is illustrated by some well-finished coloured drawings, which are excellent representations of syphilitic affections of the integument; and it is full of cases replete with interest. Mr. Ceely's experiments show that abrasion of the cuticle is by no means necessary to the success of vaccination; and hence our author justly infers that a similar law applies to the absorption of the syphilitic poison. This process he terms imbibition. The poison, after three to seven days, demonstrates its presence by local appearances; and Mr. Wilson believes that a man or a woman, having been once contaminated, and having been, to all appearance, cured, may nevertheless be so saturated with virus, as to possess the property of communicating syphilis to a sound person by means of the secretions.

Now, he relates the case of a gentleman, (p. 13,) who, having had gonorrhœa, but never previously a syphilitic sore, consulted him for a well-marked ulcer in the fossa glandis, which was followed by eruptions and sore throat. Latterly the patient had been living with a mistress, who enjoyed undisturbed health, and had left him to be married two months and a half before the commencement of his illness. He had no connexion with any woman between the time of her departure and the appearance of the sore in the fossa glandis.

"The mistress," says Mr. Wilson, "was the source of the syphilitic poison; the poison had been imbibed by the lover without lesion of surface; the sore in the fossa glandis was secondary, the produce of a secondary poison."

We confess ourselves sceptical as to the gentleman's story. A sore on the penis, followed by bubo, eruptions, and nodes, seems to us strongly like syphilis contracted in the ordinary way.

We think Mr. Wilson hasty in deciding a case to be of syphilitic character. For instance (Case 7)—a young woman, after marriage, suffers from excoriations of the vagina, the result of violence on the part of the husband. She then has an eruption of "red pimples;" then she falls into bad health, the tonsils inflame, suppurate, and burst. Are we not guilty of a gross injustice towards the husband to affirm, upon such evidence, that he has infected his wife with syphilis?

We turn with pleasure to the description of the different forms of cutaneous eruptions, and their transitions from one variety to another; they proceed, according to the author, from one syphilitic poison, and all the varieties of the manifestation of that poison, are due to modifications in itself; modifications having reference to concentration, assimilation, and susceptibility. For this subject we must direct the reader to the work itself. But we cannot quite understand Mr. Wilson, when he describes the following case as an instance of tubercula annulata after *gonorrhœa*. A young woman, aged 20, had gonorrhœa in the month of August; about Christmas she had a sore on the vulva; in the month of January she had an eruption on the skin. Now, why is the sore to be overlooked, and the secondary affection attributed to a previous disease, which rarely gives rise to any constitutional disorders of that character?

Mr. Wilson deserves thanks for his industry in collecting and recording the cases contained in his work; but we do not think that he is quite alive to the serious import of the conclusions which he has drawn in the chapter upon "Hereditary Syphilis," and which, in our opinion, are based upon insufficient evidence.

It is affirmed that the syphilitic poison, once received into the blood, remains there for life!! the infected wife must remain infected as long as she continues to live; the infected child must remain infected until death.—P. 158.

"The question then comes before us, What, 'if an infected child grown to manhood should marry? And with still greater force. What, if an infected child, grown to manhood, should marry the daughter of an infected wife? I feel convinced that a considerable proportion of those diseases which pass under the name of scrofula, are the produce of the syphilitic poison, are in fact not scrofulous, but syphilitic. In conclusion, I beg to repeat, that lupus, kelis, lepra and psoriasis, are forms of cutaneous disease, all having their origin in syphilis."

It were hard to say whether this assertion be most groundless, most absurd, or most pernicious; groundless, because there is literally no evidence worthy of value in its favour; absurd, because scrofula is known to be a term applied to an assemblage of symptoms, influenced by air, light, food, and other causes, and existing most where the luxuries and vices of society are unknown; pernicious, because it authorises a medical practitioner to insult an innocent parent with an infamous accusation. Is it not enough in a family, that a child should suffer from enlargement of the cervical glands and desquamation of the integument (a common occurrence in the highest circles), but that husband and wife must look at one another with suspicion, and mutually inquire from which side comes the syphilitic infection? Suppose that neither the man nor his father were ever so affected, is he justified in suing for a divorce on the ground that his wife has brought the venereal disease as a marriage portion? When in society we meet with a young lady, upon whose face or arm there may be a small patch of lepra, are the young men to point the finger of scorn at her as one syphilized? Mr. Erasmus Wilson would have it so; but he is not, we feel assured, aware of the needless misery that such an idea, once fostered, would create; nor does he seem to think, that such crude assertions, emanating from so respectable an authority, but rejected by the public, shake the confidence which should be reposed in us as well-judging and sober-minded men.

Life of Dr. John Reid, late Chandos Professor of Anatomy and Medicine in the University of St. Andrews. By George Wilson, M.D. Pp. 316. Edinburgh. 1852.

It will be in the recollection of our readers, that shortly after the death of Dr. Reid, in 1849, a Memoir of his life was announced from the pen of Dr. Rose Cormack, and that close upon the heels of this followed the announcement of a Memoir by Dr. George Wilson. Upon this, Dr. Cormack withdrew from the field; but finding, after the expiration of more than a year, that the promised work was still *in nubibus*, he placed his valuable papers at the disposal of a friend, by whom the interesting Memoir was written which appeared in the *Medical Times* for 1851.

The pledge of Dr. Wilson has been at length redeemed, although the words of the Jacobite song are applicable to the volume before us,—

"And oh! but ye've been lang a comin'!"

The purchasers of Dr. Wilson's Memoir will, however, have no cause to regret that it was anticipated in our pages, for from that source much valuable information has been derived, though, we freely admit, it is always acknowledged.

The present volume is a concise, well-written account of a life which did not admit of any great variety. Indeed, the author has shown his discrimination in not overdoing the sketch. The sad history of poor Dr. Reid's frightful sufferings and death, together with the change wrought in his mind, is simply but well told; and it certainly presents one of the most remarkable illustrations of the power of religion, in affording support under the heaviest trials that can befal a man. Interspersed throughout the narrative are comments and reflections; and we fully agree in the justice of the following remarks, which have reference to the removal by Mr. Fergusson of the greater part of Dr. Reid's tongue:—

"Here, surely, was a mournful combination of ingredients of humiliation and sorrow. But this was by no means all. The surgeons were the attached friends of the patient. They did not gather round him, with cold professional eye, to discharge an official duty. Fellow-lecturers, fellow-students, or fellow-scholars and old playmates, they all were; and now they were assembled to perform with grieved hearts a cruel and painful task. For doctors so circumstanced there is no sympathy in the unprofessional public heart. The surgeon who can lift his knife upon a friend is looked upon as little better than an assassin in spirit. Men glow over the tale of the Roman Brutus condemning his sons to execution; and women weep at the spectacle of Virginius stabbing his daughter to save her honour; but no one compassionates the surgeon who nerves his heart to inflict suffering upon one he dearly loves, or reveres the moral courage which guides his unfaltering hand."

There is, alas! but too much justice in these observations. Daily experience teaches us how lightly the world regard the feelings of a medical man, and how apt it is to confound his sacred calling with the indifference of trade. The petty dealer whose mind is cramped by retail dealings, thinks of cutting down to the lowest figure the hard and well-earned account of him who has laboured to restore the blessings of health; and he who calls himself an honest man, and who would cry shame on a starving wretch that steals a loaf of bread, thinks it perfectly fair and legitimate to "do" a doctor out of his fee.

To the thoughtless and unreflective, the perusal of the Life of John Reid will teach a solemn lesson, and no one can read it without serious thoughts, or exclaiming with the Preacher, "Vanity of vanities, all is vanity."

The Jacksonian Prize.—The Council of the Royal College of Surgeons have just awarded the Jacksonian Prize of 1851 to Dr. Edwards Crisp, of Parliament-street, for his essay on "The Causes, Diagnosis, and Treatment of Obstructions of the Intestines within the Abdomen." Dr. Crisp also obtained the same prize in 1845, for an essay on "Injuries and Diseases of the Blood-vessels."

PROVINCIAL CORRESPONDENCE.

IRELAND.

THE CITY OF DUBLIN SANITARY ASSOCIATION

Deserves much credit for its persevering efforts for the reform of abuses whose continuance can only be attributed to the supineness and negligence of those whose duty it should be to watch over the public health. Private associations must, however, he extremely limited in the field of their operations, and without assistance from influential quarters the labours of a few philanthropic physicians and private gentlemen cannot be expected to achieve much against such obstacles as are thrown in their way by the habits of confirmed negligence with regard to all that concerns personal and domestic cleanliness, and the ventilation and sewerage of their dwellings, which unfortunately characterise almost the entire of the poorer classes; while the operations of such bodies may be regarded as wholly ineffectual, as relates to those more extensive and important agencies in the production of disease which come under the heads of city sewerage, street and house ventilation, water supplies, both by river and pipes, etc. Nothing certainly conduces more to the preservation of health, than strict attention to personal cleanliness, not only as regards the body, but also the clothes; and, wherever facilities for bathing and washing exist, the dispensary medical officer should invariably impress this maxim on the poor, and take every opportunity to urge it on them for adoption. We notice with great pleasure that, owing to the enterprise of a few gentlemen, public baths have been recently opened in Dublin on a very commodious plan, and presenting to the poor the great inducement of extremely reasonsble charges, as low as twopence for a warm and one penny for a cold bath. We would only here observe, that the closing of the baths on Sunday appears to us a very unwise proceeding; many of the poorer classes are engaged in laborious occupations until a late hour on Saturday night, and are thus prevented from availing themselves of the baths, which they might, if kept open, say until 10 or 11 a.m. on Sunday. We learn that these baths have succeeded remarkably well during the short period they have been open,—little more than one month. While so much time is being lost about the Government Baths and Washhouses Bill, we would call the attention of physicians in our country towns to the example here offered them. A little judicious enterprise on the part of a few individuals could accomplish for each town what we cannot but designate as a real blessing to the poor.

At a recent meeting of the Dublin Sanitary Association, attention was called by Dr. Vance to the condition of the river Liffey, who stated, that it would be desirable that the Corporation should take some steps with regard to the bed of the river in certain situations adjoining the great thoroughfares of the city. The bed of the Liffey is in many places in a most disgusting and dangerous condition. The sweeping power of the stream is quite inadequate to keep it even moderately free from natural slime and artificial filth of all kinds, and at low water, especially in the warm seasons, the odours exhaled are of the most pestiferous kind, and salute the olfactory nerves of those whose business brings them within any reasonable distance of the river side, while they are absolutely intolerable at one of the most crowded bridges of the entire city. It was stated by Sir Edward Borough, that an intention was entertained by the Corporation to cause lateral sewers, running at each side of the river, to be constructed. We know of nothing which demands more prompt attention at the hands of those who are at all concerned in the cause of hygienic reform.

HEALTH OF THE CITY (DUBLIN).

Mr. James Houghton reported that epidemic fever of a very malignant type was still alarmingly on the increase. In Cork-street Hospital, on the 25th instant, there appeared 153 cases, the number of cases at the same date last year having been only 60. Up to Thursday there had been a death from fever every day in hospital. The sporadic type of fever this year was more fatal than he had known it to be for the last five years. There cannot be a more significant commentary on the present hygienic condition of Dublin.

We may take occasion here to remark the great want of some accurate general system of registration of the amount of disease and the mortality per cent. for any given period in the Irish metropolis. No city of such importance is in a more backward state in this respect, and, indeed, with regard to vital statistics in general: thus, it possesses no registration of deaths, births, and marriages, beyond that kept in a very loose way by the hospital and parish officers.

DUBLIN HOSPITAL GRANTS.

Petitions are about again to be presented in favour of the continuance of these grants. When we consider the extremely imperfect accommodation afforded by the present condition of the Dublin hospitals, as compared to those of other cities, in point of number of beds in proportion to the population, we cannot but think that any interference with their existing means of support would be an irreparable evil to the Dublin poor, and we trust that Government will see the justice of continuing these grants.

SURGICAL DIPLOMA OF THE UNIVERSITY OF DUBLIN.

Dr. Samuel Gibson, M.B. T.C.D., and scholar of the house, has had the honour of being the first to receive the new diploma of the Irish University, qualifying him to practise surgery. Dr. Gibson has thus enjoyed the advantage of completing his education in arts (an extensive and very successful one, as his rank of scholarship attests), medicine, and surgery, within the walls of the same institution. He has thus been saved the annoyance, expense, and trouble of going out of his native country to obtain a joint medico-chirurgical qualification, so indispensable now-a-days, but which it was next to impossible hitherto to complete in the Irish school.

APOTHECARIES' HALL OF IRELAND.—ANNUAL PRIZE OF FIVE GUINEAS.

The subject selected for the year 1852 is the following:—"The Indigenous Plants of the 'Dublin Pharmacopœia';" including their history, botanical character, their ultimate and proximate analysis, the average value of the several forms and menstrua ordered in the "Pharmacopœia;" with any improved formulæ for obtaining and preserving their active principles. The candidates will also be required to give in a written statement of the several processes adopted in each experiment, as well as of any chemical tests or physiological proofs made in evidence of their therapeutic efficacy. The examination will be held upon Monday and Tuesday, the 3rd and 4th of May next, and candidates are required to send their names to the Secretary of the Court a clear month before the days named for the examination.

We congratulate the Directors of the Apothecaries' Hall on the judicious selection made this year for the subject of their prize. It contrasts most favourably with that of last year; and we make no doubt that the result, as far as regards the acquirement of a sound and practical knowledge on the part of the candidates, will be most satisfactory. The subject is one also much more qualified to promote original observation among the students, and certainly far more conducive to the interests of science than a well-ground and parrot-like repetition of facts and theories common in every text-book.

GENERAL CORRESPONDENCE.

THE CASE OF MR. PASCOE.

I.

[To the Editor of the Medical Times and Gazette.]

Sir,—As your Article of the 17th instant contains remarks and severe strictures upon the medical evidence given by myself upon the late trial of William Hamlyn Pascoe at our March Assizes, I feel called upon to come forward and offer my statement of the circumstances and the grounds upon which that evidence was given; from which you will perceive, that the opinions contained in my testimony were not stated without consideration, or formed without a previous consultation of authorities upon the subject of savine as a medicinal agent.

My answers, then, to the judge, against the propriety of using savine as a therapeutic agent, were formed under the following considerations:—

1. Although I had been more than twenty years in practice, I had never used, or known any other practitioner to use, the drug.

2. Upon consulting Dr. Royle's Manual of Materia Medica, I find him giving the action of savine as irritant, so as to be even poisonous, and often used to cause abortion, although in small doses it is stimulant and emmenagogue. He gives the proportion of the oil at three per cent., and the dose from two to five drops. I find him, too, giving the authority of Dr. Pereira for the infusion of savine as an emmenagogue, but in so weak a form as one part of savine to sixty-four parts of water, the dose being half an ounce or an ounce, that I did consider fourteen or fourteen and a half drops of the oil, taken at three doses in the day, to be an excessive quantity.

3. Before forming my opinions, I had also consulted Dr. Paris's seventh edition of the Pharmacologia, where, after stating that Dr. Home, of Edinburgh, was in favour of savine as an emmenagogue, he declares, that the adverse opinions of Cullen had brought it into disrepute, as occasioning determinations of blood to the

uterus, and, if given in large doses, occasioning hæmorrhage and inflammation of the bowels, that its activity depends upon its essential oil, and that the old tincture is now removed from the London Pharmacopœia. He gives the dose of the oil to be from one to three drops.

These, then, were the authorities upon which I formed my opinions, which I declare, without fear of contradiction, were given upon oath conscientiously, and to the best of my judgment. Men in general matters hold various opinions; but in no cases are opinions more opposite or conflicting than in medical cases. I say here, that I still entertain the same medical opinions upon savine as I gave at the trial; and in the report of that trial the fact ought, in justice to myself, to have been more prominently set forth, that I distinctly stated, that the quantity of oil of saviue ordered by the prisoner would not produce dangerous effects upon the woman, but might produce the peculiar effects of savine—as irritation and purging; and that, as a consequence of this, miscarriage might take place.

If any of my opinions are erroneous, I have the satisfaction of knowing they were not hastily given; and if by the majority of the Profession they are held to be erroneous, no one could more deeply regret than myself the effects of these opinions, or more earnestly desire (as you suggest) an application to the Secretary of State for a re-consideration of the prisoner's case.

As you, in support of your medical judgment, have alluded to some circumstances not directly medical, I think it but fair to explain upon one of them. You say, and say truly, that Mr. Pascoe, in order to get the child buried, sent for the parish sexton's assistance. It might have been added, that the sexton's daughter lived with Mr. Pascoe, and was concerned in the secret care of the woman in her premature birth.

That, in giving my evidence, I was influenced by no one motive but the proper one, may be inferred from the fact, that, when this same Mr. Pascoe was, twelve months before, indicted and tried for manslaughter, my evidence upon certain symptoms of poisoning by opium was so directly opposed to the symptoms stated by another medical man to have been found in the case, that an acquittal followed; and here I may observe, that it may appear singular, that upon each of these trials I was the medical witness called. I was called upon, however, by proper authority, and I felt upon each occasion that I ought not to shrink from a duty, however disagreeable that duty may be; but, at this last trial, I particularly suggested to the parties concerned in the prosecution that some other medical evidence should be taken.

I am, &c. WM. MOORMAN, jun., Surgeon.

St. Columb, Cornwall.

II.

[To the Editor of the Medical Times and Gazette.]

SIR,—I scarce need apologise for troubling you with this letter, as it is our duty ever to defend the right, and, in the case of Mr. Pascoe, lately tried at Bodmin, the right seems so loudly to call for defence, that I have dared to lift up my voice on its side; I hope, however, that other voices, which carry more force than mine can, will not be silent, but will declare themselves loudly, and make themselves heard in the quarters where they can effect most good.

It appears that Mr. Pascoe was convicted chiefly on the medical evidence given by Mr. Moorman, surgeon of St. Columb Major. In your article of the 17th inst., you declare your opinion, that Mr. Moorman's statement is a mistake from beginning to end. In this opinion I fully and entirely concur.

Mr. Moorman has committed a gross error in swearing that no man of competent knowledge would administer oil of savine in such doses as those ordered by Mr. Pascoe, unless for the purpose of procuring abortion.

What can Mr. Moorman have been thinking of? Can he, indeed, have been thinking at all? Surely the charge of want of competent skill should be shifted from Mr. Pascoe's to Mr. Moorman's shoulders.

Savine is still used as an emmenagogue by many medical men; the oil is the preparation generally used. To produce the emmenagogue effect, large doses are often necessary.

Hear what some authorities say on the subject, and contrast Mr. Moorman's statements by the side of them; and then judge you which are the worthier of trust, the men whose written opinions I have quoted, or Mr. Moorman, the despiser of Hooper.

MOORMAN.

"It has been used for disease of the womb in old practice."

"Three doses daily, 36 drops, would convey about 14 drops of oil of savine; and used in that quantity, I am of opinion this medicine would produce the peculiar effects of savine, such as irritation, or purging, or inflammation probably of the large intestines, and, as a consequence of that, miscarriage might take place."

In answer to questions by the Judge, etc.—

"I think a man of competent knowledge would not prescribe it in such quantities (14 drops daily), except to produce abortion."

"I think that a man ought not to prescribe such a thing in such quantities for any legitimate purpose."

"Unless the object were to produce abortion, the prescribing such quantities would indicate want of skill.

"Even in the old practice, I do not think so large a quantity of savine would be used."

"Fourteen drops of the oil daily too large a dose to be used, excepting to produce abortion."

CONTRA.

ASHWELL.

"Savine, the juniperus sabina, is a powerful stimulant and emmenagogue; but its use is at present much restricted. Its deobstruent power is attributed to a volatile oil. . . . Where there is a feeble and languid circulation savine is a suitable stimulant, but its use is injurious where there is plethora and irritation. . . . . Of the oil, from 2 to 20 drops may be taken two or three times daily."—P. 83.

BOVIN.

"Some of these substances, besides being general stimulants, act in a special manner upon the uterine organs, and are termed emmenagogues. The use of these remedies, combined with strict regimen, is more proper in the present affection (amenorrhœa) than in dysmenorrhœa. Aloes, rue, and savine have often been found efficacious."—*Practical Treatise on Diseases of the Uterus*, p. 427.

BRANDE.

"It is perhaps the most powerful uterine stimulant of the Materia Medica, and is occasionally administered in amenorrhœa, though always requiring the utmost caution lest it induce inflammatory action."—*Materia Medica, Art. Savine*, p. 152.

BALLARD AND GARROD.

"Savine is a topical irritant, rubefacient and vesicant, and has been recommended for internal use as an emmenagogue."—*Materia Medica*, p. 334.

HOOPER (GRANT'S EDITION).

"Savine is a powerful and active medicine, and has been long reputed one of the most efficacious in the Materia Medica for producing a determination to the uterus, and thereby proving emmenagogue. . . . . Dr. Home appears to have had very great success with this medicine, for in five cases of amenorrhœa which occurred at the Royal Infirmary at Edinburgh, four were cured by sabina, which he gave in powder, from a scruple to a drachm, twice a day."—*Medical Dictionary*, p. 810.

PEREIRA.

"The emmenagogue power of savine is fully established. . . Savine is not much used internally; but in cases of amenorrhœa and chlorosis, depending on, or accompanied by, a torpid condition or deficient action of the uterine vessels, it may be given as a powerful uterine stimulant. In such cases it proves a most efficient remedy. According to my observation, it is the most certain and powerful emmenagogue of the whole Materia Medica. My experience of it, therefore, confirms the statements of Home. Though I have employed it in numerous cases, I never saw any ill effects result from its administration. Fodéré relates a case of a woman who, to produce abortion, took every morning for 20 days, 100 drops of the oil, and yet went her full time, and brought forth a living child.

Emmenagogue Dose of the Oil.

Pereira—From 2 to 6 drops.
Ashwell—Maximum dose, 20 drops, 2 or 3 times a day; or, 60 drops daily.

I am, moreover, of opinion—and my opinion is not formed without experience—that savine is far less powerful to produce abortion than is popularly believed. Drs. Pereira, Ballard, and Garrod, all agree that it is less likely to injure the fœtus than the mother.

If it ever does produce abortion, it always at the same time makes the mother ill. Pereira says, "It ought to be well known, that in those cases in which it may succeed in causing miscarriage, it can only do so at the risk of the woman's life." Now, is it probable, that a drug which thus produces its effects on the fœtus by causing a dangerous state of the mother, could have procured abortion without any uncomfortableness, as it is said to have done in this instance? Look at the case. Miss Nicholls took 14 drops

of the oil daily "for some time," yet, when the bottle was finished, was she ill? Had the medicine made her feel ill? No; for she says, "I thought I was better." Being improved, she ceased taking the drops, and Mr. Pascoe gave her pills to take. (What were they?) The pills came to an end, and then she visits Mr. Pascoe again. This time she stays in his house, and takes no other medicine than salts, (daily quantity not stated,) and lo! she miscarries. At once the blame is laid on the oil of savine, and Mr. Pascoe is charged with giving it to cause the uterus to throw off its contents.

Let us reason on these points. It must be observed, that some weeks elapsed between the time she ceased taking the savine, and the day on which she aborted. She made two journeys from Probus to Cubert, and took a box of pills between the journeys.

Is it probable, that a medicine which can only induce abortion by producing a powerfully acrid and irritating action on the mother, so as often, indeed, to endanger her life, can have acted in this case, and caused expulsion of the child, although a considerable time had elapsed since she had ceased to take it, and although she had felt better than usual while under its influence? —the girl, be it borne in mind, being a sufferer from a dangerous disease of her heart, a condition, of course, rendering her more obnoxious to suffer from any disturbance. I think the opinion of all medical men will be against such an opinion, and yet such is said to have taken place in the case under consideration.

I have shown some good written authorities, all tending to overthrow Mr. Moorman's evidence. I believe, were all the medical men in the land to record their opinions, Mr. Moorman would find himself in a ludicrously small minority. I cannot but blame Mr. Rogers for not having consulted other medical opinions. Bodmin contains some men well able to give a good opinion.

What other evidence tending to criminate him might have been put in, I know not; but, as it was not put in, and as that which was put in was untrue, the man must of a necessity be innocent, because no proof of guilt is given.

The rest of the evidence is of little weight. There is decided failure in the attempt to prove Mr. Pascoe's cognizance of Miss Nicholls' condition. Mrs. Catherine Hockin sees Miss Nicholls opening the front of her dress, and, with a truly feminine suspicion, thinks it is to examine her breasts. What can a man want to see there but the breasts? Oh, yes, it must be the breasts; and dark suspicions crowd on the matron's mind. Alas! but too true. But Mrs. Hockin never saw Mr. Pascoe examine the bosom; she only saw Miss Nicholls opening her dress,—the good dame's fancy finished the operation. Mr. Pascoe wanted to examine his patient's heart; he did so. A medical man, in auscultating and examining a heart, seldom notices the breast at all, much less the areola. There is then no evidence that Mr. Pascoe examined the breasts, or was aware that the girl was pregnant. She herself had never told him. How was he to know?

Most probably he was aware of the absence of the catamenia, and might believe that the re-establishing of this functional discharge would aid in relieving the heart, and gave the savine with this view. It is not a question whether in doing so he did wisely. The point at issue is, whether he did give the oil of savine with this legitimate and justifiable extent, or whether with the criminal one of procuring abortion. Is there any evidence of the latter? None. Then we are compelled to believe the former, and to acquit Mr. Pascoe of the charge laid against him.

I trust that you, Sir, with the other powerful ones in our Profession, will not fail to exert your powers to render justice to Mr. Pascoe.

Mr. Moorman, too, who must see the error he has made, will, I trust, show himself a brave and honourable man, by coming nobly forward and avowing his error, and thereby make all the reparation he can. I am, &c.

EDWARD WILLIAM LOWE, M.R.C.S.E.

Congleton.

III.

[To the Editor of the Medical Times and Gazette.]

SIR,—I think every respectable member of our Profession must feel the justice, truth, and charity of your able remarks upon the trial of the unfortunate Mr. Pascoe, and his condemnation to the society of felons and murderers for the next ten years of his life, upon the erroneous evidence of a professional brother. Professor Christison states, in his "Dispensatory," second edition, 1848, that "the emmenagogue virtues of savine deserve attention." Those virtues have been recently commended in strong terms by Dr. Pereira, who says, "he has never met with any of the unpleasant effects on the bowels and kidneys so generally dreaded by practitioners."

Again, Professor Christison says, "this drug is believed by the vulgar to possess the power of inducing miscarriage, and is sometimes used by them for perpetrating this crime. But it cannot act in such a way without violently affecting the stomach and bowels, and so bringing life into extreme danger." He fixes the dose of sabinæ ℥ij. ad ʒv.

Surely the opinions of Mr. Moorman cannot be placed in the balance with such testimony; surely it was his duty to give the unhappy prisoner the benefit of such testimony, and surely it is now his duty to make a manly avowal of his error. I know nothing of the antecedents of either Mr. Moorman or Mr. Pascoe, and judge only from the report of the trial, which has strongly impressed me with the feeling of an innocent man being condemned to a punishment worse than death.

I trust, Sir, you will not allow your able pen to sleep in this sad affair, and I must hope with you, that some influential members of the Profession will bring this case before the Secretary of State; and I must further hope, that the Profession generally will be ready, if necessary, to use every exertion,—if so, the result cannot admit of doubt. I am, Sir, &c.

Bankside. W. O. BELL IRVING.

IV.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am indeed surprised on reading the testimony of Mr. Moorman, given against an unfortunate apothecary, Mr. Pascoe, at the late Lent Assizes, held at Bodmin, in the county of Cornwall. Mr. Moorman has not displayed an overstock of competency to practise his profession, in stating that a man of competent knowledge would not administer fourteen drops of the oil of savine in twenty-four hours except for abortion. Dr. Pereira states, in his second edition of Materia Medica and Therapeutics, etc., vol. ii., page 1068,—"In cases of amenorrhœa and chlorosis, depending on or accompanied by a torpid condition or deficient action of the uterine vessels, it may be given as a powerful uterine stimulant. In such cases it proves a most efficient remedy. According to my own observation, (Dr. Pereira,) it is the most certain and powerful emmenagogue of the whole Materia Medica. My experience, therefore, confirms the statements of Home. Though I have employed it in numerous cases, I never saw any ill effects result from its administration. In chronic rheumatism, with a languid circulation in the extreme vessels, Chapman, in his Elements of Therapeutics, speaks in very high terms of it. It has been used as an anthelmintic. The dose of the oil of savine as an emmenagogue is from two to six drops diffused in a mucilaginous or oleaginous mixture." This, I should suppose, would be sufficient proof that the oil of savine may be used with safety and in larger doses than that given by Mr. Pascoe to Miss Nicholls. Again, Dr. Locock (no mean authority), in the "Cyclopædia of Practical Medicine," vol. i, page 69, speaks highly of a combination of myrrh, aloes, sulphate of iron, and essential oil of savine, in amenorrhœa. Yet, in the face of the opinions of these two great men, Dr. Locock and Dr. Pereira, both sanctioning the use of it, Mr. Moorman states, in answer to the first question put by the Judge, that no medical man would administer savine except to produce abortion. His ignorance or want of competency at last comes out; he says, "he knows there is a book called 'Hooper's Medical Dictionary;' I do not use it myself, but I have known it used by medical men; it is not in general use." I must here beg to inform him, that there are few, very few, medical men who do not possess it, Mr. Moorman one of the few. It is indeed a valuable book of reference, both for old and young practitioners. Evidence given by such a man, who evidently is not aware of such books as "Pereira's Materia Medica," or "Churchill on the Diseases of Females!" I must agree with you, Sir, that there is not the least evidence against Mr. Pascoe that he administered the oil of savine with intent to produce abortion. If there were any medical men in court during the trial, they ought in justice to their own professional characters to have informed the counsel for Mr. Pascoe that Mr. Moorman was labouring under a very great mistake; probably then the unfortunate man would have been acquitted, instead of being sentenced to ten years' transportation.

I sincerely hope some leaders of the profession will make out a clear case, and lay it before the Secretary of State, whose quick discernment will, I am sure, lead him to see that Mr. Pascoe has been convicted on very mistaken evidence.

If we administer savine, after such a verdict, to a patient, it is sure to be considered as used with intent to produce abortion; the consequences, of course, are ten years' transportation, to which every one of the Profession will be liable. I fully believe not a single medical man is safe; I am not. It is a very favourite medicine with me, combined with aloes and iron, in cases of amenorrhœa and chlorosis; but, if I am liable to transportation,

am bound to discontinue its use, therefore my patients must suffer from complaints with which it has pleased the Almighty to afflict them. He has sent various remedies for various complaints, but we are not allowed to make use of them. I am very sorry to trespass at such an unusual length on your valuable columns; but, when we see ignorance in full bloom, it is enough to rouse any one; and I am sure you will not allow the case of Mr. Pascoe to pass over without giving the Profession an opportunity of expressing its utter indignation at its result. I am, &c.

Mile-end. A Subscriber and M.R.C.S.L.

V.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having just read your account of Mr. Pascoe's trial, and also your remarks, I hasten to express my entire concurrence with the latter, and to express a hope that the suggestion in your closing paragraph will be immediately acted out, for it cannot be that, upon such evidence, the "Profession" will quietly allow a "brother" to be transported for ten years. I have always thought that a prisoner, even of the worst description, had the benefit of a doubt. Surely, in this case, there was ample room for such mercy, at the least in mitigation of punishment. Can it be evidence of intended guilt, "acting in accordance with an acknowledged authority," "writing a prescription to be made up by a chemist," and "sending for the sexton," not to mention other things.

Why, Sir, what can the counsel have been about? Is it not a well-known fact, that females so situated, especially if respectably connected, apply for medical advice for a particular complaint, for the express purpose of getting rid of the cause of their shame, carefully concealing everything likely to create a suspicion of the truth. Are we, then, to suspect every unmarried female, and, in fear of transportation, also give up the brightest ornament of our professional character, that of carefully concealing the faults of our patients, whether male or female, under which honourable feeling I cannot help thinking Mr. Pascoe has risked his own character rather than betray that of his patient; and, admitting he may not have been very prudent in all the circumstances connected with the present case, where, as you justly observe, is the proof of intent? Certainly not in the evidence. Again expressing a hope, that, for the honour of the Profession, no time will be lost in securing a re-hearing of the case, I am, &c.

Humanitas.

P.S. Ought not the Apothecaries' Society to take the initiative in defence of a licentiate thus situated?

VI.

[To the Editor of the Medical Times and Gazette.]

Sir,—On reading your leading article last week, referring to the case of William Hamlyn Pascoe, I referred to Pereira's "Elements of Materia Medica," and found the following very decisive paragraph, vol. ii., p. 726: "Savine is not much used internally; but in cases of amenorrhœa and chlorosis, depending on or accompanied by a torpid condition or deficient action of the uterine vessels, it may be given as a powerful uterine stimulant. In such cases it proves a most efficient remedy. According to my own observation, it is the most certain and powerful emmenagogue of the whole Materia Medica. My experience of it, therefore, confirms the statements of Home, ('Clinical Experiments.') Though I have employed it in numerous cases, I never saw any ill effects result from its administration."

Dr. Nevins, in his "Translation of the New Pharmacopœia," quotes from Pereira, and gives the dose of the oil from mij. to mvi. The prisoner gave doses of four drops and a half.

This is so thoroughly at variance with the opinion of the medical witness, which opinion appeared to influence the mind of the Judge more than any other evidence, that I lost no time in sketching a letter to the Secretary of State, in which I placed the paragraphs from Pereira and Nevins side by side with the evidence of Mr. Moorman.

May I urge upon some of your readers to follow up the application to the Secretary of State with other letters, and he will, no doubt, look at the faulty evidence, and not allow the sentence to be carried into effect, if the verdict has been founded solely upon evidence which shall be proved to be erroneous. I am, &c.

Bedford. T. Herbert Barker, M.D.

ON UTERINE DISEASES AND THEIR TREATMENT.

[To the Editor of the Medical Times and Gazette.]

Sir,—In an Editorial Article in the *Medical Times and Gazette* of March 20th, a hope is expressed, that some gentlemen will assist by *post-mortem* examinations at several metropolitan hospitals, to elucidate the *quæstio vexata* as to the frequency of uterine ulceration.

Fully believing that truth is your sole object, and not the giving a colourable assistance to any party purpose or prejudice, I am at a loss to know why the investigation should be confined within the narrow limits of ulceration, and not embrace the various other abnormal conditions of the uterus and its appendages, seeing that they are equally, or even more, prominent in their effects upon the female system.

All who have made uterine pathology their study must earnestly desire every legitimate method of investigation and the most searching scrutiny into this class of diseases, feeling as assured as they are of their own existence that any inquiry, conducted with impartiality and care, and made upon proper subjects, will tend to substantiate the statements of those who affirm from their daily practical experience, that these maladies, in their various forms and phases, are among the most frequent the physician is called upon to combat with.

But, by the plan proposed, will proper subjects be obtained for the examination? or, in other words, do hospital female patients constitute a fair sample of the general female population? I think not. I fully agree with the opinion so ably and eloquently expressed by Dr. Murphy on a recent occasion, in a speech, which, for manliness of spirit and vigour of style, deserves to be printed in letters of gold.(a) "That women do not die of such diseases. They very seldom enter general hospitals; and if, in consequence of other complaints, they become inmates and die there, they are placed under circumstances that would contribute more than any other to arrest the progress of the primary affection; they are kept perfectly at rest, and morbid action is going forward in another place; hence, if they had such a disease, it is highly probable that there would be no trace of it before death."

Waiving, however, this objection, it may be very pertinently asked, why autopsies should be required to settle the question? Are the statistics of the dead-house alone trustworthy, or, rather, are they at all to be relied upon,—at all events in uterine ulceration, when in one and the same Report(b), Mr. Pollock, ("whose facts," Dr. J. A. Wilson says, "might be depended on," as "it was his" (Mr. Pollock's) "custom to have all women who died in the hospital examined as to the condition of the uterus and ovaries whatever might be the disease they died of,") states, according to Dr. R. Lee, that in 583 autopsies he did not find a single case of simple ulceration of the os uteri, and only 23 of diseased mucous membrane of the uterus; while Dr. Murphy clearly demonstrates, from the same Report, that 62 cases, at least, of that number of 583, belong, by Mr. Pollock's own showing, to the class of uterine disease the result of inflammation? That, by some means, grave oversights or mistakes have arisen in the course of Mr. Pollock's dissections, and, consequently, got into his Report—mistakes which nullify all his conclusions and render his labours useless—is fully and satisfactorily established by Mr. Holl, who states, that last year, at the same hospital which furnished Mr. Pollock's statistics, out of 44 women who died there, and "in which the state of the uterus was examined," disease was found in 13, or very nearly 1 in every 3! What inference can be drawn from such unsatisfactory statements beyond this,—that, valuable as *post-mortem* evidence unquestionably is, when carefully and impartially conducted, it may even unintentionally be made the means of deceiving us, and therefore should be received with caution when its supposed results lead to doubtful and suspicious conclusions.

We shall arrive at far more valuable facts and incontrovertible statements, if every British practitioner, who has experience of and practice in uterine disease, would come boldly forward and give the medical world the benefit of his knowledge. Let him relate his cases; show how others of his professional brethren, holding views opposed to his, have let their patients linger on for years in hopeless misery and distress, until he has been summoned to their aid and restored them, if not in every case to health—for that, perhaps, has been irretrievably lost by long neglect or something worse—at all events to comparative ease and comfort. The gentleman so practising "may find himself surrounded by rumours that he is treating complaints which have no existence,"—for rivals are often not scrupulous as to the weapons they use or the assertions they make to serve their nefarious purposes,—besides whom there will be found in every community some men prejudiced against all innovations, and others too indolent to adopt them; men who will never learn; will never advance with the times, but remain the same yesterday, to-day, and for ever; these it is not my

(a) *Vide* Report of the Royal Medical and Chirurgical Society meeting, *Lancet*, Feb. 7, 1852.
(b) Ibid.

intention now to notice, but it appears strange that any number of men so intelligent and intellectual generally as medical men are acknowledged to be, should act differently, both diagnostically and therapeutically, with regard to the uterus to what they do with any other part of the body, without any sufficient reason being adduced for the deviation. If the physician has a patient with obscure abdominal disease, does he not use every means in his power to arrive at true pathological conclusions respecting it? Does he not notice the aspect—the eye, the skin; watch the secretions and excretions, carefully ascertain whether tenderness, or induration, or protrusions exist, and even then sometimes feel regret that he cannot for a moment look through that thin tegumentary covering which hides from him what he would so gladly know?

When the surgeon is called to a case of inflammation of the eye, is not his first step to see what state the organ is in? Then, but not till then, does he not, as circumstances demand, deplete, counter-irritate, or, if an ulcer be there, will he not use caustic? And he does all this notwithstanding that he is fully aware the patient's constitution is at fault, and requires constitutioual treatment, which he will take care to have contemporaneously carried out.

But, "in disorders found affecting the uterine system," we are told, "that our remedies, if their use is to be attended with success, or their administration founded upon pathological investigation," they "must be directed to the general system, cautiously, if not sparingly, and in most cases not at all directed to the part itself." And this is because "almost in all cases constitutional affections may be detected, not only propagating but maintaining local diseases and local derangements."(a) When this is said of cancer and other incurable blood diseases, in which the local manifestation is only typical of the general contamination, we understand and appreciate the warning it conveys, viz., that all attempts to cure by local means are for the most part useless, and frequently injurious. Experience also tells us, that in such cases constitutional treatment is almost invariably equally impotent, and the patient, in a few months, dies worn out by suffering. But this, so obviously, is not the progress of uterine affections, that we are driven to believe the writer of the paragraphs quoted above does not wish to convey so palpable an absurdity as his words would at first sight appear to indicate, viz., that a common ulcer on the womb is as difficult to cure as a cancerous breast; that he does not intend to assert there is a special and peculiar uterine pathology altogether different from the ordinary pathology of the general system, but only what every tyro in the Profession ought to, and probably does, know, that uterine, in common with most or all other local diseases not occasioned by injury, have a constitutional origin, either inherent or acquired—that is to say, they would not arise if the person was in a sound state of health previously.

Well, then, does this constitutional origin preclude or forbid our using local remedies, when we have localised disease under our care in other parts of the body besides the uterus? Decidedly not. Take the case of an ulcer of the leg. I have just now cured one which has been twenty-two years open. The constitution was clearly at fault, as shown by the long continued deficiency of bile and costive evacuations; the skin of the limb was of a dull chocolate-red, and the veins were slightly dilated. I gave local support by strapping; I applied a local stimulant (caustic); I ordered constitutional means, and, in thirteen weeks from the beginning of the treatment, the man was well. All the remedies directed alone to the general system that the world can boast of, would never have cured this man without the use of local means. And so it is in the vast majority of the cases of ulcerative disease of the womb. But, perhaps it may be argued, that there is a difference between the uterine ulcer and the ulcer on the leg; so there is, but the difference is often one of situation only, and, could we apply the same treatment—caustic, support, and rest—to the former as we can to most of the latter, we should very much abbreviate the duration of the case. This, of course, is impossible, so far as support is concerned, and even rest is very difficult to be obtained; for patients with extensive uterine ulceration will frequently perform all the acts of life as if no disease existed; and here again the analogy between the two cases is striking. Some time ago I had a man under my care with a deep fetid ulcer on the leg extending nearly round the calf, yet he would constantly walk from Launceston to Plymouth, a distance of twenty miles, without, as he assured me, being inconvenienced by his wound.

I do not say, that the vis medicatrix naturæ may not occasionally act with uterine ulceration, as it sometimes, but very rarely, does in tubercular ulceration of the lungs, and I believe the spontaneous cures in the two situations are, under ordinary circumstances, nearly equal in frequency. If my opinion be anything like an approximation to the truth, can any man for a single moment think he is doing his duty to his patient by leaving her to this remote and almost hopeless contingency, when he can convert doubt into certainty, despondency into joy, and pining sickness into blooming health, by the mere passing of a speculum, sweeping a stick of caustic over a sore, or applying a few leeches to an inflamed and indurated organ?

The public should never know of our professional differences, nor be called in to judge between us, or I would say, let the patient herself decide the course she would prefer,—whether to linger on for years an invalid, or be cured in a few weeks by the aid of an instrument which, when properly used, outrages no feeling of delicacy in its application, is unattended by pain, and against which the only argument is, that it may be, nay is, used oftener than necessary. For what purpose—for the sake of gain? That can scarcely be, for the medical man charges for his attendance, whether he uses the speculum or not, and he would save both time and trouble by its being discarded. He who practises his profession in all its various departments, either as a physician or surgeon, can have no motive for asserting that a patient has uterine or ovarian disease when she has not, for what object could be gained by his making it appear that her disorder was in one part of the body where it was not, rather than in another where it really was. He would not be paid more for attending her if the disease was in the uterus, than he would be if it was in the stomach, or liver, or heart, or lungs. We may take it for granted, that she has something the matter with her, for, with the exception of some few hypochondriacal idlers—a race fast dying out—persons, although they will swallow quack nostrums *usque ad nauseam*, and get their friends and druggists to assist them in the endeavour to ascertain which will ruin their constitutions soonest, yet very rarely seek the regular practitioner until they are really ill.

But it may be said that the physician accoucheur has a motive for asserting that uterine disease exists when it does not. I pity the poor grovelling mind that would harbour so base a suspicion. It is not, however, necessary for me to vindicate the honour of the profession it is my privilege to belong to; suffice it to say, although some may be found in it, as in every other walk of life, unworthy their vocation, their number is few indeed compared with the noble hand whose life-long object is the relief of suffering,—men who have a higher principle of action than mere gain, and who would as soon lose a right hand or eye as be guilty of a meanness or a falsehood.

The only other inducement for the too frequent or unnecessary use of the speculum must be that arising from improper feelings—a supposition too horrible to be entertained even for an instant, and which I at once dismiss from consideration with the deepest disgust and loathing.

It has been asserted, that ulceration of the os and cervix uteri is always of a specific character, that it is either syphilitic, or scrofulous, or cancerous. I cannot agree in this opinion, notwithstanding the wide range it is capable of being stretched to; at the same time it must be conceded, that ulceration and other forms of uterine disease are, as might *à priori* be expected, much more frequently met with in delicate persons, and those contaminated with one or both of the first-named diseases than in sound and healthy women; or, in other words, are more often the result of constitutional debility or disease than of local bruise or injury.

Well, then, taking it for granted that the uterus and its appendages are sometimes in an abnormal condition, and that they are governed by the same laws as the rest of the body, why should they not be equally carefully and minutely examined when sufficient and cogent reasons are adduced for supposing that disease is present there?

The medical practitioner can have but one valid reason that I can see for not doing so, and that is a praiseworthy one—a sense of his own utter ignorance of those diseases, even when they are presented in their most cognate forms to his notice.

But all men are not candid and honest; it is painfully interesting to see the various shifts and devices used to hide a want of knowledge. Some boldly proclaim there are no such diseases; others, more timid, assert their infrequency, and the non-occasion for interference; some "don't use any examination;" others "don't use instruments, being satisfied with digital investigation," and probably view their "educated" finger with the same complacency as they do the bee's-wing in their port,—very pretty to look at, but of no real value or utility. Again, some, descending in the scale, (and *facilis descensus* when interest prompts them,) if they can get hold of another man's patient, assert she has had nothing the matter with her womb,—that her constitution has been ruined by the unnecessary interference, but they will do their best to remedy the evil; others go bluudering on, can't find the os uteri,

(a) *Vide* Report of the Royal Medical and Chirurgical Society meeting. *Lancet*, Feb. 7, 1852.

or do not know when they see it; but, being told there is an ulcer there, apply caustic where they can, and leave the patient worse than they found her, or, what is even more to be regretted, herself prejudiced against the very means which, properly applied, would cure her.

This may appear to many as much overdrawn, or too highly coloured; it is neither; and, before this series of papers is concluded, I will, with the Editor's permission, and without travelling from my immediate subject, prove my assertions.

One or two cases I will now subjoin. A few months since, Mrs. W. applied to me with symptoms indicating disturbance of the uterine system. I accordingly examined her, and found, on the posterior lip of the os uteri, an ulcer of the size of sixpence, which bled on the slightest touch. Considering the case would require more time than I could bestow on it, I declined attending her, but stated what was the matter, and advised her to employ some other medical man, who, while he would give the necessary attention, would not charge her as I should be obliged to do. I heard nothing more for some weeks, but at length was sent for in consultation, and, on examination, found the ulcer on the os unaltered, but, in addition, another on the wall of the vagina, not opposite to, nor in possible approximation with, the uterine one. On inquiry, it appeared that my medical friend, whose locks have grown not only grey, but white, in the Profession, had, in conjunction with a gentleman equally mature, repeatedly examined Mrs. W., understanding that she had an ulcer somewhere, but, being unable to find it, they had applied caustic where they could! I am warranted in drawing this conclusion, for, when I passed his instrument, (a tarnished, long-handled original three-bladed machine, which he had a short time before bought second-hand at a sale!) I showed him the uterine ulcer and his own, and applied caustic to both. On my next visit, feeling myself ill, I requested him to see what progress had been made, but he could not then even show me the ulcer, and, after fumbling about for some considerable time, he removed the ponderous weapon, remarking at the same time, "You know, Dr. Roe, she complains of pain directly above the pubic bones," indicating with his hand where that region was! I know nothing more of the progress of the case, beyond that I again showed him the ulcers, which were already looking healthier, and left him in possession of the case.

I have many times found considerable difficulty in bringing the os uteri into view, especially when using the bivalve speculum, and when the uterus has been much displaced; but in this case there was no obstacle, except that furnished by the operator's want of skill.

About eighteen months ago, a poor woman, living some miles in the country, applied to me for advice with profuse menorrhagia. On examination, I found a polypus of considerable size proceeding from the mouth of the uterus. She had been under the care of a medical gentleman of talent and experience for some time, who, although he had attended her in her various accouchements, had never even proposed an examination. I sent her to him with a note, stating the nature of her disease, and he speedily relieved her of the malady by the ligature.

On June 10, 1849, I was consulted by Mrs. J., from Callington, a tall, well-formed person, but of pale and suffering appearance. She stated, that for some two or three months she had been afflicted with pain similar, and equal in severity to that of labour. Her surgeon had been in attendance upon her during that time, but had done nothing in the way of examination beyond pressing the abdomen outside her clothes. She was the mother of several children. On examination per vaginam I found the uterus healthy, but a large tense elastic tumour, situated at the posterior superior part of the vagina, between the uterus and rectum, but apparently springing from the uterine wall. It conveyed the impression to the finger of being a collection of fluid. I requested my friend Mr. Fuge to see the case with me, which he did on the 12th. On the 20th he passed a long trocar and canula into the tumour, and drew off about eight ounces of clear serum. The puncture immediately closed, and her symptoms were at once relieved. On the 25th the operation was repeated, and on July 17 she returned home well. How much agony this woman would have been saved, had she been "speculumised," when she first began to suffer! I am, Sir, &c.

Plymouth. E. T. Roe, M.D.

DIETETIC USE OF COD-LIVER OIL.

[To the Editor of the Medical Times and Gazette.]

Sir,—The accompanying case has been obligingly forwarded to me by Mr. Spender, of Bath, for many years the medical attendant of the late Mr. Barry, the subject of the case.

It was Mr. Barry's own wish that his case should be published in some medical journal for the benefit of others, for he felt that his life had been prolonged by the use of the cod-liver oil, which he took more as an article of aliment than as a medicine.

To enable the profession to appreciate fully the clear and able detail of the case, and of the *post mortem* examinations given by Mr. Spender, it may be useful to premise that Mr. Barry was naturally a remarkably healthy man. In stature he was under the middle height. He was well built, of strong physical organization, and, as he advanced in years, acquired a healthy degree of corpulency.

I had been for years in the habit of visiting the old gentleman as a personal friend, and I saw him for the last time about six months before his death. He had been then living upon the cod-liver oil for about two years, and up to about that time there had been little or no alteration in his appearance. In the summer months he went out occasionally to take the air and transact business in a Bath-chair, and he sometimes took walking exercise on the terrace where he resided without any other support than his ordinary walking-stick. There was, in fact, little or nothing of the decrepitude of old age about him, and his mental energies, which were always above the average, were as vigorous as ever, and he took a lively interest in all public passing events. His senses, too, were all perfect, and he could read the smallest print without spectacles.

But about that time, in September, 1851, he began to break down. His pulse, which, a few months before, was like that of a strong and healthy middle-aged man, was changed in character; and his voice, which used to be strong enough for a huntsman, was become feeble.

I may mention, too, that the portion of egg he sometimes took beaten up in his coffee was but very small, as he himself and his housekeeper also assured me; and the morsel of muffin never exceeded the eighth of an ounce in weight. He did not take those articles every day regularly; sometimes he could not take them at all, and perhaps never oftener than two or three times a-week.

I was often present when he took the cod-liver oil. He always took it floating on a table-spoonful of brandy-and-water, and generally washed it down with a glass of sherry.

With his pint of Scotch ale, he always smoked a pipe of tobacco, and, considering his advanced age and all the circumstances of his case, he slept well, and suffered but comparatively little, except from the feeling of emptiness and exhaustion, which latterly came on with greater severity.

He often expressed a wish to be relieved, yet always submitted himself with pious resignation to the will of Providence, for he was a man remarkably strong in Christian belief and faith, and had a fervent hope of enjoying, on departing this life, the presence of his Redeemer in a happy eternity.

The prolongation of life, I need not remark, is the principal object of the physician's mission, and the discovery of any medicine or article of aliment that can conduce to so desirable an end, cannot fail to be a great acquisition to the Profession, and an advantage to society that cannot be overvalued.

In Mr. Barry's case, it was palpable that life had been prolonged by the use of cod-liver oil as nutriment; and the merit of being the first to give it as an aliment to sustain life, is certainly, so far at least as I know, due to Mr. Spender, of Bath.

The prolongation of life with regard to matters of property, is often of momentous importance to families. There are numerous cases on record, well-known to the lawyers, showing, that if persons had lived but a few hours, or less time, longer, so as to survive others, great advantages would have accrued to their successors.

I could myself mention several cases of the kind, but feeling a reluctance to intrude further on your valuable space, I shall confine myself to giving one instance only.

I happened to have, many years ago, at the same time, two patients who were both on their deathbeds. One of them was a wealthy testator; the other, as it afterwards turned out, was a legatee under the testator's will. They both died the same day, but unfortunately the legatee died a few hours before the testator, and the legacy, consequently, became lapsed. Now, I am satisfied, from the nature of the cases respectively, that if the value of the cod-liver oil had been then known, the life of the legatee could have been prolonged beyond that of the testator, and a poor family would have obtained that which would have made them comfortable for life.

In Mr. Barry's case there are, apart from the effects of the cod-liver oil, several striking features, which I hope will attract the notice of learned and practical pathologists, to whose views on the subject, I am sure, Sir, you would willingly give a place.

The case is, viewing it in all its bearings, perhaps one of the most

curious and interesting upon record, and, as bearing on the properties of cod-liver oil as a singularly nutritious substance, it is probably unique.

I am, Sir, &c.

GARRETT DELLON, M.D. Edin.

5, Spanish-place, Manchester-square.

At the commencement of the year 1840, Mr. Barry, then in his 67th year, experienced a most acute attack of sciatica. The severity of the symptoms soon yielded to the employment of a seton introduced over the track of the nerve; but during the two or three weeks before he consented to the employment of the remedy, the pain was so intense as to compel him to take large and repeated doses of opium. Subsequently to this seizure, he was occasionally liable to milder forms of the disease; these, however, did not recur very frequently, but when they appeared he would resort to the opium. His general health and appetite continued without being much impaired until the beginning of 1849. He then lost not only desire for ordinary food, but all ability to take it. To such an extent had the loathing arrived by the July of that year, that the effort to masticate and swallow any portion was immediately followed by an uncontrollable disposition to vomit. I then advised him to take morning and evening a table-spoonful of cod's-liver oil, mulled wine at midday, a pint of Scotch ale every evening, and also, with a view to lessen the distressing feeling arising from a sense of vacuity, as well as to obviate sciatica, and to procure sleep, an opiate every night. This plan was pursued for about two years and a half, his sustenance during that period consisting almost exclusively of the ingredients mentioned above, with the occasional addition of coffee, with a portion of egg dissolved in it, at breakfast; sometimes a morsel of muffin. His appearance and bulk did not much vary from the date specified (viz., July, 1849,) until the beginning of the present year. About every three or four days he had an evacuation from the bowels of a very extraordinarily natural appearance, bulk, and consistency, when the character of the aliment was considered. Latterly the bowels were unable to act without the assistance of enemas; and four or five months ago the bladder also lost the power of evacuating its contents. About six weeks since, the ability to take the ingredients constituting his sustenance became diminished, he rejected his ale, then his oil, and could only take small portions of wine, or brandy and water. For the last two weeks scarcely anything could be swallowed. The opium was compelled to be increased in frequency to allay the wretched sensation of exhaustion, and at last he died by literally falling asleep and not waking again.

On examining the body, considerable food was found still present, and no unnatural condition or appearance whatever could be detected in the stomach. This organ was not even diminished in size, owing probably to the daily distention by the use of the Scotch ale, a pint of this being commonly taken within a short period. He died on Sunday evening, Feb. 15, 1852, in the 79th year of his age; and the body was examined 48 hours after death.

57, Gay-street, Bath.

THERAPEUTIC ACTION OF VARIOUS MEDICINAL AGENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—A thorough insight into the therapeutic action of different medicinal agents tends materially to augment the real utility of our art, and we have therefore reason to be grateful for any individual contributions in reference to the subject, and ought to endeavour to turn them to practical advantage.

Dr. Handfield Jones's paper on the Action of Antimony, in the *Gazette* of April 10, is interesting as the result of scientific research; it does not, however, seem to tend to such practical results as I consider might be obtained by connecting it with the more empirical investigations which have been already made, and I, therefore, purpose making a few desultory observations on the subject.

Dr. Jones's experiments clearly show that increased action of the mucous membranes results from the administration of antimony, but I cannot believe that on this alone depends the relief which the medicine in question affords in pulmonary inflammation. That antimony produces a peculiar modification of the state of the blood there can be no doubt. Dr. Jones's experiments tend to indicate that such is the case, and such is the opinion of many other physiologists, as well as Dr. Bocker. The simple fact, of the influence of antimony in causing purulent formation, constitutes a practical proof of this. I cannot, however, for a moment admit, with Dr. Jones, that antimony has any power whatever in promoting the secretion of the liver or the kidneys, but, on the contrary, I maintain that the reverse is the case. The emetic action of antimony may cause the discharge of bile in the first instance, if the liver be gorged or the gall-bladder full, but that the secretion of bile is promoted is decidedly not the fact, for I never yet saw a person under the pure influence of antimony, but the pale clayey stools marked a total absence of biliary secretion, and at the same time the renal secretion would also be found more or less completely suppressed. In hospital practice these facts may be readily verified.

My theory of the action of antimony is simply this. That it modifies the constitution of the blood, making it more amenable to the action of the cutaneous and mucous membranes, but at the same time rendering it unfit for renal elimination, and more especially for bilious secretion. But the function of the liver is surely not confined to the mere elaboration of bile; is there not reason to believe that it prepares oily and other carbonaceous matter for the pulmonary combustion? If, therefore, the second hepatic action be arrested, as well as mere secretion, then the usual quantity of fuel will not be conveyed to the lungs, and, the ordinary amount of oxygenation not being required, respiratory action is consequently diminished in force and frequency, to which the atonic state of the nervous system also conduces. Dr. Jones clearly demonstrates the peculiar state of the oily matter in animals killed with antimony, which evidently has a bearing on the question.

In olden times, it was well known that antimony would make monks chaste and pigs fat; the why and the wherefore remain for modern science to resolve. But while we consider antimony as a cholagogue and a diuretic because our fathers did so before us, we shall never know how to use this valuable medicine properly. We cannot at present tell why we give it in pulmonary inflammation, or how it is best to administer it. No one would think of antimony as a remedy in renal disease, though, if there be any foundation for the opinion which I have so briefly adverted to, it may prove a good remedy for albuminuria, diabetes, etc.

I take the liberty of referring Dr. Jones to a paper which I published in the *Lancet* of March 28, 1846, as embracing some curious facts respecting antimony, and I sincerely hope that he will continue his interesting investigations in reference to other medicines.

I am, &c. BUTLER LANE, M.D.

Ewell, Surrey.

CASE OF CONGENITAL HYDROCEPHALUS, WITH BREECH PRESENTATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—In Dr. Lee's "Clinical Midwifery," there are five cases of congenital hydrocephalus given, all of which proved fatal to the mother. As I have lately been fortunate enough to have a successful case of this kind, may I hope you will allow me space in your Journal for the insertion of a few notes of the case.

I was engaged to attend Mrs. C——, residing at Wimbourne; age 38 years, married 17 years; has had eight children. At the last confinement she had twins, and, since then, has miscarried with twins. She is of a spare habit of body, and nervous temperament.

Labour pains commenced about 10 a.m., March 19th, 1852; and I saw her about 2 p.m. The pains were then very feeble and irregular in their intervals.

On examination, I found the os uteri fully dilated, the bag of membranes low down in the vagina, and the presenting part of the child so high up as barely to be reached, and therefore I was unable to determine the presentation.

After waiting till 5 p.m. without any advance, I ruptured the membranes, and an unusually large quantity of liquor amnii escaped. I then found that it was a breech presentation, with the breech still at the brim of the pelvis, and also that a loop of the funis presented; after this, the pains slightly increased, and the labour progressed very slowly; at length, the breech was expelled, and, soon afterwards, the body and shoulders followed, by ¼ to 10 p.m. At this time there was still pulsation in the cord; the head was still detained in the cavity of the pelvis, and the pains almost ceased; in about half an hour the cord ceased to pulsate. I gave a ʒss. dose of pulv. secale, and, in a quarter of an hour, another dose. These had the effect of again exciting the uterine contractions, and of forcing the head a little lower down; but it was still detained, apparently locked between the two spinous processes of the ischia, with the face to the hollow of the sacrum, and it remained so fixed in spite of a considerable amount of traction with one finger in the mouth.

By passing the finger as high as I could reach, I could feel one ear, and perceived that the head was of a larger size than normal; the bones were also slightly movable, and the sutures between the parietal and occipital bones felt distended. I therefore concluded

it was a case of hydrocephalic head, and would require the head to be opened.

I then sent to request the assistance of my friend Mr. Sandford; but, having to send above four miles, a further delay was unavoidable; so, as the patient seemed rather exhausted, I gave her two grains of solid opium, which soothed her very much.

On the arrival of Mr. Sandford, we resolved to open the head at once, and accordingly he passed up the perforator by the side of the neck of the child, through the muscles, and into the skull, behind and below the right ear; immediately some quantity of fluid escaped, I should think nearly a pint, and, on introducing the crotchet, the bones collapsed, and the head was born directly; the uterus contracted well, and the placenta was thrown off, and removed in a few minutes, with very little loss of blood.

The delivery was completed at five minutes to 3 a.m. of March 20th, the labour being of seventeen hours' duration.

The patient was rather low just after the completion of the delivery, but soon rallied, and was fairly comfortable, with a pulse of 104. The uterus remained firmly contracted.

She afterwards convalesced slowly, but without a single bad symptom; she did not require the use of the catheter at all; the after-pains were troublesome for a few days, but, on the twelfth day, she sat up out of bed, and expressed herself as being as well as ever she had felt after any of her labours.

I have seen her this day, being three weeks after her confinement, and she is quite recovered.

In this case, from the distance of the nearest presenting part of the head, and from the contractions of the uterus, especially of the os uteri, which nearly embraced the neck of the child, great care was required on the part of the operator in order to keep the os uteri clear of the point and edges of the perforator, this being the chief difficulty in its use.

Hoping I have not trespassed too much on the space of your valuable journal, I am, &c.

Wolverhampton. C. A. Newnham, M.R.C.S., L.A.C.

IRON SPICULÆ IN THE CORNEA.

[To the Editor of the Medical Times and Gazette.]

Sir,—The difficulty of extracting spiculæ of iron or steel imbedded in the cornea or conjunctiva,—an accident so frequent among engineers, is often so much more embarrassing than one expects, that I am sure those of the Profession who are not aware that the use of the knife may almost always be avoided, will be glad to recollect, that by repeating one of the simplest of their experiments in chemistry,—the immersing a piece of iron in solution of sulphate of copper,—the iron is entirely removed. I usually use the collyrium of one to three grains to the ounce. Although I have mentioned it to many, I never saw the process referred to in print. I was first led to adopt it in my own person when abroad some years ago. While turning a steel cylinder, a point flew off, and stuck fast in the cornea, producing much pain. A professional friend having made several endeavours to extract it, was about to make an incision, when the thought struck me, and, by keeping the eye open in a wine-glassful of the solution, I was speedily relieved from all uneasiness. I am, &c.

Henry Jeanneret, M.D.

12, Finchley-road, St. John's-wood.

MOVEMENTS OF THE HEART.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having dwelt at some length in a recent publication upon the physical diagnoses of the diseases of the lungs and heart upon the recoil theory of the heart's movement in systole—a view universally ascribed on the Continent to Dr. Guthrod—I consider myself called upon to state that the said theory was fully and clearly established nearly thirty years ago by our talented countryman, Dr. James Alderson, in a paper published by him in the *Quarterly Journal of Science* for 1823. As I have had my attention directed to the above fact within a few days only, I take the earliest opportunity of doing this act of justice to Dr. Alderson, whose ingenious view, after slumbering for nearly thirty years, has now found many able advocates in Germany.

Whether Dr. Gutbrod at any time saw the original paper, or worked out the theory from the independent reasoning of his own brain, I am not in a position to decide. I would simply in this communication give honour to whom honour is due, by showing to whom the ingenious theory of the motion of the heart is really to be ascribed. I am, &c.

23, Finsbury-square. Herbert Davies.

THE FRACTURE SWING.

[To the Editor of the Medical Times and Gazette.]

Sir,—Owing to some mistake, I observe that the smaller figure in the engraving attached to my communication upon the ball and socket swing for fractures of the leg, has been left undescribed. I have, therefore, to state, that it represents the top of the arch, as constructed when the frame is made in a portable form.

Since my former letter was sent to you, I have suggested to the maker, (Mr. Bigg,) that the beam should be constructed of light iron pierced with the necessary holes, and that the centre pin should be provided with a hook at the lower extremity, by means of which the beam is attached to it.

The pulleys are connected with the beam by means of a letter S hook.

The swing thus formed is now being more fully tested at Guy's and King's College Hospitals. Your early insertion of the above will oblige Yours, &c.

Rye, Sussex. Alfred Roberts.

THE GRADUATES' COMMITTEE OF THE UNIVERSITY OF LONDON.

[To the Editor of the Medical Times and Gazette.]

Sir,—Will you permit me to ask the Honorary Secretary of the Graduates' Committee of the University of London to publish, for the benefit of your readers, the numbers of graduates in arts, laws, and medicine respectively, who have attended each Committee meeting during the past twelve months, giving to any one the higher title only when he may have two.

The graduates are now informed that a greatly increased effort is being, or about to be, put forth for the coercion of the Senate. The Committee nominally consists of thirty-six members, but only a mere fragmentary number attend the Committee meetings, and these, therefore, constitute the real Committee.

It is commonly reported that the graduates in laws and medicine take very different views as to the means to be employed in this struggle; and, since the graduates in medicine have a greater stake in the issue than those in laws, it would be satisfactory to learn if the proposed coercive measures are supported by those graduates in medicine who are now members of the Committee.

The movement will succeed, doubtless; but it is the opinion of many, that the disrespectful expressions and efforts which have been employed by the Committee will greatly delay the desired consummation. I am, &c. M.B.

London.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

John Bishop, Esq., F.R.S., F.R.C.S. Eng., President, in the chair.

Mr. Canton brought under the notice of the Fellows of the Society

A PECULIAR SYMPTOM OF RHEUMATIC OPHTHALMIA,

which he had so frequently had occasion to notice associated with this complaint, that, in cases the nature of which otherwise might have presented difficulty in their diagnosis, had been rendered easily distinguishable by its presence. He alluded to a peculiar white deposit collected at the internal or external canthus of the lids. It is often abundant, and in mild attacks but scanty, and often exists where there is no deposit in the urine; but in proportion as this secretion, in many cases, becomes charged with the lithates, so will the white deposit be lessened in amount at the canthi. Sometimes it is associated with slight pains in the loins, limbs, or the larger joints, but of which the patient makes no particular mention; while at other times the pain may be more severe, and distinctly articular. It was, however, in those cases more particularly where the affection was not especially marked as one of a rheumatic character, that this symptom, Mr. Canton believed, would be found valuable, as indicative of the real nature of the complaint, and which pointed out, at the same time, the advisability of employing those medicines which are generally so beneficial for rheumatism elsewhere situated. Mr. Canton had had cases

under his care, where the symptom referred to was present, where other rheumatic signs were absent, and which, resisting other treatment, had then been benefited by the exhibition of alkalies with the tincture of aconite and colchicum wine.

PRESERVATION OF PATHOLOGICAL SPECIMENS.

Mr. B. W. Richardson recalled the attention of the Society to his new mode of preserving pathological specimens in antiseptic gases. Early in last session he (Mr. Richardson) had exhibited to the Society a specimen that had been kept for a long time in arseniuretted hydrogen gas. The poisonous nature of this gas had, however, led him to discontinue its use, and he had since used, with great success, 1st, simple nitrogen; and, 2ndly, chloroform vapour, the antiseptic power of which had been shown by Robin and Dr. Snow. The specimens exhibited were four in number. The original one, in arseniuretted hydrogen; two, (portions of an ulcerated lung,) one in nitrogen, the other in chloroform vapour; and a uterine tumour, in nitrogen. The portions of lung had been preserved for seven months, and none of the specimens had undergone the slightest change, either in colour or consistence. The mode of using the nitrogen gas was very simple: the preparation was first fixed in the bottle, which was then filled with water through a hole in the cork, and the gas introduced by displacement under water. With chloroform, it was only necessary to drop a few drops of the liquid into the bottle while held in warm water, closing the bottle as soon as the vapour began to pass over. The mouths of the bottles must be perfectly sealed. Mr. Richardson was of opinion, that the cause why these specimens were thus preserved rested in the simple fact, that they were removed from the influence of oxygen; and he believed that pure nitrogen, used in the manner described, would be found to surpass every other process for preserving animal food for dietetic purposes.

Mr. Barlow read a paper

ON FATTY DEGENERATION.

The author began by insisting on the great importance and extent of the whole question of fatty degeneration, which had naturally interested so many observers, from the vast number of pathological consequences which it, and it only, could explain. The subject was to be viewed comprehensively, and as a whole, and not as illustrated by any particular organ or part. It could not be separated, unless by the imagination, from the yet larger question of atrophy, of which, indeed, as Mr. Paget had said, it was a manifestation. Fatty degeneration was the consummation and result of atrophy—a word which should be used as denominating the slightest impairment of nutrition, as well as that obvious wasting of parts which paralysis, phthisis, and many chronic maladies presented in forms more or less striking. Seeming hypertrophy and real atrophy co-existed; muscular fibres might seem enlarged to the eye; but, viewed with the microscope, might be found degenerated into fat, as had been long shown in reference to the hypertrophied heart, and lately by Mr. Hancock in relation to the (so-called) hypertrophied bladder. Bulk was in these cases no measure of power, but just the contrary. The author thought that the general subject of fatty degeneration might be best pursued by looking at the conditions known to be essential to perfect nourishment, and then fairly tracing the results of their failure. The degeneration might be produced—first, by a wrong or defective state and composition of the blood; second, by an insufficient supply of blood; third, by a deranged or obstructed influence of the nervous system; fourth, by an imperfect, unhealthy, or declining state of the part to be nourished. These conditions were, in every respect, the reverse of those which Mr. Paget had specified as most important to healthy nutrition. The author treated these points in detail, and the following is a mere outline of his remarks:—

I. The state of the blood in reference to nutrition had been noticed by Harvey in an emphatic manner. It was modified by age, and varied by disease to a remarkable extent. It had been found deficient in corpuscles, in anæmia, (or spanæmia, as Simon termed it,) hæmorrhage, and some cases of granular degeneration of the kidney; but much on this subject was to be inferred from reasoning on certain obvious conditions of the system; nor could it be expected that analysis, however ingenious and subtle, could be expected to cope with half the difficulties of the question. The blood might be said to grow old; he believed the climacteric disease, as Sir Henry Halford had denominated it, to be a mere sign of degeneration—oftentimes of fatty degeneration, or that chiefly. This kind of decay happening late in life, and gradually loosening its tenure, could hardly be called morbid or abnormal, being altogether as much in the order of nature as the fading of a leaf at the autumnal season. But decay was impatient, and anticipated time: premature degeneration would occur from various general and local pathological states, in many whereof the blood was to a certainty most seriously involved. The observations of Dr. Ormerod and Dr. Quain upon the general relation of wasting maladies to this destructive process, as well as those made by Mr. Gulliver on its occurrence in various parts and states, were referred to at length. The author knew, from his own observations, the vast practical bearings and high interest of this part of the subject. Fatty degeneration was very frequently the most perilous complication, and it was necessary to watch for, and if possible to detect it. Persons sometimes during chronic maladies would turn pale, and expire in a moment: the heart was at fault; degenerated to the utmost, it could act no more. It was to be suspected that the hæmorrhage of disease, as well as artificial losses of blood, had very often assisted in inducing, and quite as often greatly aggravated, this downward change. Cases of fatty degeneration had occurred at six and eight years of age, and Dr. Snow Beck had observed an instance of degeneration of the small cerebral blood-vessels in a child aged one year and seven months; he had detected minute granules in their coats, but did not consider it certain that they were oil-globules, as they had not been tested by dilute hydrochloric acid and ether.

II. The question of inadequate supply of blood was, for the most part, inseparable from that already treated of. Pure anæmia could never last long; abstraction of blood even, if too frequent, led to the spoiling of what remained; yet some practitioners had bled the palest and most bloodless, on the bare imagination of inflammatory action: but not thus could be remedied confirmed anæmia, or atrophy repaired, or degeneration arrested. The changes throughout the arteries and their branches, which led to local obstructions of the circulation, needed fuller inquiry; those obstructions of the heart, as had been well shown by Dr. Quain, acted in the manner of partial ligatures, and led to local anæmia and decay, or they might proceed the length of completely cutting off the supplies of a part. Whether narrowing of an artery would cause local atrophy or death, depended on the condition of the neighbouring vessels, which might be too degenerated themselves to enlarge and compensate for the withdrawn supply. The same remark applied to ligatured arteries in cases of aneurism. Arterial degeneration might be so extensive, and especially if the heart were fatty and feeble, as to prevent the circulation being carried on. The peculiarity of the cardiac circulation, noticed by Mr. Swan, and remarked on by Dr. Quain, as favouring fatty degeneration of the heart, was observed upon. There was no free communication between the branches of the coronary arteries, and the conservative influence of anastomosis was absent. Harvey had dwelt most fully on local modifications of the general circulation. The author thought that some local deaths which had been referred to obstructions of an artery or large branch of it, had really depended on the arrestation of the streamlets in its smaller ramifications. All general and local defects of circulation were to be considered perilous in proportion as the general nutrition might be impaired.

III. The question of nervous influence, in relation to the failure of nutrition and fatty degeneration, was extremely complex, but there could be no doubt whatever that its derangement or withdrawal had a large share in the production of atrophy and its results. Rostan, Lallemand, and others, had referred to cases of softening of the brain, which they partly attributed to grief and anxiety. But though nothing was more certain than that the mind so deranged the vital function as to waste the body and "fret it to decay," there was nothing harder than to measure its influence,—to separate it from other simultaneously acting causes of destruction, or to define the exact part which it played among them. The withdrawal of nervous influence by mechanical means, such as those seen in the paraplegia of disease or fracture of the spine, was to be considered by itself; the mind could not reach the affected parts; volition and emotion were withdrawn; and the atrophy which followed was to be explained more readily than that which happened in parts yet open to mental impressions. The state of the mind often injured nutrition, in an indirect manner, by withdrawing the body from those exercises and diversions which constituted the main sources of its vigour; by depressing and interfering with the heart's action, so that the blood was circulated with insufficient frequency and force; by modifying the respiration so extremely that the oxygenation of the blood was less perfect than it should be; by seriously interfering with the digestive function, the disorders of which spread through the body; and, oftentimes, by banishing or breaking the sleep, which had been called so finely, "chief nourisher in life's feast;" but he doubted not that, in many cases, from what might be observed of the effect of the emotions upon different secretions in time of health even, that there was frequently, besides all this, an indirectly depressing influence exercised by the mind, both

locally and generally, on the function of nutrition; and he thought it probable that it might at times aid greatly in leading to degeneration, and in aggravating it where it already existed. But he would refer to some observations by Mr. Paget, in reference to matters more or less touching this subject; and also to Dr. Holland's chapter, contained in his "Notes and Reflections," on the effect of attention on the bodily organs.

IV. The fatty degeneration of parts, as affected by general and local defects of assimilation, was one of the most difficult yet important divisions of the subject. Each tissue might be termed a centre of appropriate and discriminative nutrition. It had a special life of its own, though that were in the circle of, and dependent on, the general vitality. It had, doubtless, hereditary strength or weakness, such as affected the entire organism. It had its own circulation and its own nervous influence, liable to especial impairments; it might be subject to premature death, or be found, when the body as a whole had died, with a structure perfect to the minutest line. The healthier a part was, the likelier was it so to remain; and the converse was certain. The least atrophy was an approach of death, no matter whether it concerned a fibre, or the complex anatomy of all the frame. But mere atrophy was recoverable; and, though parts of an organ had degenerated irrecoverably, the surrounding structure might be restored to vigour, and compensate effectually for the loss sustained. The only part in a degenerated condition which could be watched by the eye, was the cornea; and a case of great interest had been communicated to the author by Mr. Charles Simpson, in which the arcus senilis, which had been both well and frequently observed, had disappeared. He agreed with what Dr. Quain had written respecting the treatment of the degenerated heart, and the hope, in some cases, of arresting the changes in it. Reparation there could not, of course, be seen; but the undestroyed fibres might enlarge and strengthen, and its beats become firmer, and its sounds more audible. In the young, the middle-aged,—nay, in some quite old,—in all, indeed, who had much sound structure left,—fatty degeneration might probably be counteracted by a new vigour infused into the body, and by certain changes in the atrophied tissues which adjoined or bordered on those which had perished. The author adopted Dr. Quain's theory of the process whereby fatty degeneration was effected, and referred to a suggestion made by Dr. Williams respecting its nature. Dr. Quain had found, by accident, changes produced in the hearts of the dead similar to those which often happen in the living under circumstances of low vitality, of a feeble or deficient circulation, of impaired nervous influence, of structure long damaged by insidious atrophy. It was the power, or rather the combined powers, of life, however vague we might term the expression, which preserved us in integrity, and hindered the changes which implied death. An extract was read from Dr. Quain's memoir touching this point. How long the tissues were preserved healthy in some cases, was not less remarkable than their premature decay in others. Mr. Canton had given him a minute description of the state of the heart-fibres of a man aged 103, which was drawn up by Dr. Quain after most careful examination; and it was only in a spot or two, and to an inconsiderable extent, that any of the fibres were found degenerate; but what was most interesting, viewed in connexion with this state of the heart, was, that the cornea was free from the arcus senilis, and, microscopically examined, only presented a very few fat-granules scattered here and there. The specimen was, through Mr. Canton's kindness, placed before the Fellows, and they might compare it with another, in which the arc had been obvious, showing the true structure of the cornea thickly crowded with countless fat-granules. The author referred to some recent observations made upon the subject of fatty degeneration, but especially to those which had been made respecting the fibres of the uterus, and the vessels of the placenta. He also directed attention to a most interesting contribution of Dr. Dittrich, who had found a fatty degeneration of the vessels of the lungs in some cases of pulmonary apoplexy, similar to that already discovered by Mr. Paget (and to which the author had, on a previous occasion, specially called the attention of the Society) in those of the brain. Dr. Kirkes had kindly given him an abstract of the principal conclusions. The most important was, that there was "a fatty metamorphosis of the walls both of the larger, and especially the smaller and smallest vessels." This occurred in the "large majority" of cases of pulmonary apoplexy. Dr. Charles Shearman had found most distinct groups of fat-granules lying in the substance of the coats of a small vessel of a degenerated heart. The "diameter of the vessel was $\frac{1}{1\,1\,1\,4}$ inch." The author had the opportunity of observing it. Marked degeneration of the cerebral blood-vessels, great and small, was found also. The author, after taking a general view of the important researches of various inquirers, asked the Society whether a grand advancement had not been made in a subject which bore largely and intimately, not only on the science but on the practice of medicine?(a)

Dr. Daniel spoke in terms of great praise of Mr. Barlow's paper, but regretted it had been curtailed at a part where facts would have been adduced, showing that intense mental anxiety, etc., may cause a disordered condition of the blood, and thus induce the degeneration of the heart, and its sudden rupture, of which he had seen two or three examples, the result of melancholia, caused by mental anxiety.

Dr. Handfield Jones referred to two facts as bearing on the question of fatty degeneration, the one being, that a certain combination of oil and albumen is essential in every act of nutrition; and the other, that the change in fatty degeneration consists in the separation of the oil from the albumen. With respect to the degeneration itself, he thought it doubtful whether it consisted of an actual conversion of the tissue into fat, or of the deposit of fat in the place of the wasted or atrophied fibre. He himself inclined to the latter opinion, and thought that facts and experiments tended to confirm that view.

Mr. Richardson joined with Dr. Daniel in his regret that the cases in which this degeneration had been brought on by mental anxiety, etc., had not been given by the author, and he inquired whether that result was caused directly or indirectly, as by the disordered state of the primæ viæ, and the altered condition of the organs of digestion, thus set up. He knew that many persons in cases of hypochondriasis seek at once for signs of fatty degeneration of the heart. Mr. Richardson then referred to the question as to the propriety of bleeding in all cases of apoplexy, and said he was satisfied that in many instances of what is termed pallid apoplexy, death is caused by failure of the central organ of the circulation. He was called lately to see an old lady who had fallen down insensible—in a fit, as the bystanders said, and they were all exceedingly anxious she should be bled. This he opposed, and finally, but not without great opposition, had some brandy given to her, which afforded great relief.

Dr. Basham said, that the question was in some measure so new as to render it difficult to collect one's thoughts, so as to examine the subject in a serviceable manner. There was one point, however, as to its being a positive decay, so that they might arrive at a distinction between that which is absolute disease, and perhaps curable, and that which is real decay and incurable. He then commented on Dr. Handfield Jones' remarks, and observed, that zoo-chemists were aware that the fibrous exudations of inflammation and pus-corpuscles contain a large amount of fat, showing the important part that element plays in morbid processes, and thus we may not be unprepared to see hereafter, that the conversion of tissues into fat may be traced by a consecutive chain of phenomena.

Mr. Henry Lee observed, with reference to the question mooted by Dr. Handfield Jones, as to whether fatty degeneration is an absolute conversion of the tissues into fat, or merely a deposit of fat in an atrophied part, that he had lately examined some tumours from the neighbourhood of the rectum, which were removed on the supposition they were malignant, and which he had found were almost entirely fat, which had been morbidly deposited, and was not a mere conversion of tissue.

Mr. Dunn would like to ask Mr. Barlow one question, Whether he had had an opportunity of carefully investigating the actual condition of the blood in cases of fatty degeneration? Pathologically considered, the subject was one of great interest and importance. For himself, he had been led to embrace the views expounded by Dr. Williams in such cases, both in reference to the products of local inflammations and to the active agency at work in the scrofulous and tubercular diathesis, in the development of tubercle itself in phthisical subjects.

Dr. Ryan suggested, that as Dr. Quain was present, and he had paid especial attention to this degeneration, he would perhaps be kind enough to furnish the Society with some information on the subject.

Dr. Quain said, that he could not hesitate to reply to the call thus made on him, although he came there rather as a visiter in search of information. In that respect he had not been disappointed. He had listened with great satisfaction to the interesting and suggestive paper which had been read, and to the important and valuable remarks made by the gentlemen who had spoken subsequently. He had so fully entered on this subject elsewhere, that he would not then go into the question at any length, but would briefly refer to some of the observations which they had heard that evening from others. The relation of mental affections to this disease of the heart was one of great interest. He had met with several cases of dege-

(a) Some portions of this highly interesting and valuable paper were, of necessity, read in abstract, its great length precluding the possibility of reading the whole at one sitting, if any discussion were to follow.

neration of the organ in individuals who had previously suffered much anxiety. In three instances, the degeneration was such as to have led to rupture of the heart, so that the sufferers may be said literally to have died of a broken heart. Mr. Richardson's observation, that mental anxiety leads to disturbance and derangement of the nutritive functions, affords no doubt a correct explanation of the source whence this impairment of structure proceeds. It is also worthy of remark, that this state of heart is often associated with a peculiarly irritable state of mind—a state probably due to an impairment of other structures as well as of those of the heart, and to the influence which the organ exerts over the comfort and well-being of the individual. Then, again, the pathological cause of, or the condition on which this state of heart depends, is one of great interest and importance, in connexion, of course, with the treatment to be adopted. There was no doubt that Dr. Handfield Jones was correct in some of his remarks. The combination of oil with albumen was a primary step in the process of nutrition, and the presence of oil with albumen in fatty degeneration was, so to speak, the evidence of final decay. These combined elements enter the blood from the chyle vessels. In this fluid they soon disappear. They enter under the influence of what we call the organizing power into the composition of the tissues and textures. Here, under the continued influence of this power, they undergo changes, they are removed, and a fresh supply afforded. But when this influence is weakened, this process of supply and removal is stopped, and the tissues return to their primitive form. He referred to his communication in the "Transactions" of the Medico-Chirurgical Society for a full detail of the mode in which this degeneration occurred. No better examples of the truth of this proposition could be offered than those mentioned by Dr. Basham, in which, in effusion of fibrin and pus, fat abounded. Substances such as these, the elements of which were held together by the feeblest affinity, soon passed into a state of degeneration. He looked with more confidence than had been expressed by some of the speakers to the means capable of arresting this process of decay. He had concluded theoretically, that fatty degeneration was the result of impaired nutrition and subsequent decay; and experience, by showing him, in several instances, how great was the benefit resulting from the means by which the only condition could be improved, and the other arrested, had confirmed the theory. Of course, so favourable a result must be looked for in cases of premature decay, rather than in those which were met with in advanced life, and in the ordinary course of exhausted nature. The fact which the researches of M. Kilian had brought to light, and those of Mr. Rainy had confirmed, viz.—that the fibres of the uterus, after delivery, underwent a fatty degeneration, and that new fibres were developed—showed that there was much ground for believing that the process was not one of absolutely irremediable destruction.

Mr. Barlow said, in reply, with respect to mental anxiety as causative of fatty degeneration, that the subject of mental affections as the origin of disease, was one of the most difficult of all questions. The evidence was very clear to prove its influence as causative and aggravative of disease, but it is very difficult to prove its direct action. Mr. Paget, in his College lectures, had spoken of the influence of nervous disorders on nutrition, and if this be correct,—of which there could not be a doubt,—its influence in inducing atrophy will be evident. The history of a case will generally show, that grief or some other depressing influence was connected with the origin of the complaint. The depressing passions exert a very injurious influence on respiration and circulation, and produce a disordered state of the system. If any one will carefully watch himself, he will readily come to the conclusion, that mental influences greatly disturb nutrition. With respect to the question of blood-letting raised by Mr. Richardson, he believed that the facts connected with fatty degeneration, would exert more influence on it than any other cause; and as regarded cases of apoplexy, or cases so recorded, he considered that very many so-called, were in reality instances of disease of the heart, and nothing was so likely to cause them to end fatally as bleeding. In real apoplexy, blood-letting is not practised, as was formerly the case, for it is frequently indicative of a tendency to decay, with fatty degeneration, and the arcus senilis,—a sign which he (Mr. Barlow) considered to be very diagnostic of that degeneration. He had not examined the blood as Mr. Dunn had inquired, but authors had described such changes in the constitution of that fluid as must exert a greater or less influence on nutrition. He (Mr. Barlow) did not possess any facts bearing on the remarks made by Dr. Handfield Jones. He had fully adopted the views promulgated by Dr. Quain in his admirable paper published in the *Medical and Chirurgical Transactions*. The conversion into fat was, he thought, both a physical and a chemical change, and may occur after death, or while life is departing.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 16th inst.:—

Bolton, Robert Thorley, Hexham, Australia.
Desplan, Henry, Bath.
Kirby, Edmund Adolphus, Hamstead-road.
Lawrence, Henry John Hughes, Carmarthen.
Macnamara, Francis Nottidge, Uxbridge, Middlesex.
Merry, Francis William, Shottesham, All Saints, Norfolk.
Montgomery, James Barclay, Penzance, Cornwall.
Pickstock, George N., Belize, Honduras, West Indies.
Rogers, H. J., Peninsular and Oriental Steam-packet Service.
Spender, John Kent, Bath.
Stocker, Alonzo Henry, Grove-hall, Bow, Middlesex.
Wilkinson, Edwin Adolphus James, Birmingham.

At the same meeting of the Court, Messrs. William Mackay Ogilvie and Francis Yeates Toms passed their examinations for naval surgeons. These gentlemen had previously been admitted members of the College, their diplomas bearing date respectively July 26, 1847, and August 14, 1848. Mr. Toms having been appointed to H.M.S. North Star, proceeds in search of Sir John Franklin.

Graduates for M.D., University and King's College.—April 15, 1852:—

Allen, Christopher A., Cork.
Brown, Philip, Durham.
Crosland, George, Yorkshire.
Elliott, Ernest, Portsmouth.
Jones, John Dalston, London.
Molloy, Robert, Pentonville.
Popham, William Home, London.
Richards, Owen, Cardiganshire.
Ross, James, Elgin.
Young, James William, Co. Meath, Ireland.

Military Appointments.—23rd Foot: Staff-Surgeon of the 2nd class, Richard Gamble, M.D., to be surgeon, vice Bradford, promoted on the staff. 35th Foot: William George Clarke, gent., to be assistant-surgeon, vice Fairbairn, promoted on the staff. Hospital Staff: Surgeon Edward Bradford, from the 23rd Foot, to be staff-surgeon of the 1st class, vice Andrew Foulis, who retires upon half-pay. Assistant-Surgeon William Home Fairbairn, M.D., from the 35th foot, to be staff-surgeon of the 2nd class, vice Gamble, appointed to the 23rd foot. *Memorandum.*—The removal of Assistant-Surgeon John Knox Leet, from the 85th Regiment to the 10th Foot, and the appointment of Mr. William George Clarke to the assistant-surgeoncy of the 85th foot, on the 26th March, 1852, have been cancelled.

Medical Appointments and Vacancies.—The office of house-surgeon and dispenser to the Portland-town Free Dispensary is vacant, salary 65*l.* a-year, with an unfurnished residence. Candidates must not be more than forty, and duly qualified to practise. No private practice allowed, so that a legally-qualified medical man is expected to do everything but lodge himself, and give up his whole time to the charity, for 65*l.* a-year. *Proh pudor!* The pay is much worse than that of a banker's junior clerk. Medical officers are required for the Tamworth union; one for the Fazeley district, salary 50*l.* a-year, with 10s. for each midwifery case, 1s. and 1s. 6d. for vaccination, and the usual Poor-law extras; and one for the Kingsbury district, salary 26*l.* 12s. a-year, with the same extras as for Fazeley. Leeches to be provided by the medical officers. Date of election, the 24th inst. A house apothecary will be elected on the 13th of May for the Dorset County Hospital, Dorchester. Testimonials on or before the 28th inst. Candidates must possess the double qualification, and be unmarried. They must also engage for three years, if their conduct be approved. Salary 50*l.* a-year, with 10*l.* annually as Secretary. A house-surgeon is wanted for the Liverpool Royal Infirmary; board and lodging, but no salary. Candidates must be M.R.C.S. Testimonials on or before the 28th; election next day. A resident house-surgeon and dispenser is required for the Milton and Gravesend Dispensary, salary 75*l.* a-year, with furnished residence, and 17*l.* a-year allowed for coals, candles, washing, etc. The double qualification required, and the person elected is not permitted to practise within three miles of Gravesend, for one year after resigning the office. Election, 28th of May. At the Rotherham Dispensary, a medical officer is wanted, salary 120*l.* a-year, with house free of rates and taxes. One qualification required. Election, 1st of May. House-apothecary is wanted for

Addenbrooke's Hospital, in Cambridge. Election, 26th of May. Salary, 86*l.* a-year, with board and lodging. Testimonials on or before the 21st.

Obituary.—On the 15th inst., at Andover-lodge, John Burton, Esq., late of the medical staff of the Madras army.

Her Majesty's Levee, of the 21st, was attended by the following members of the Profession:—Dr. Ferguson, Dr. Ashley, and Mr. Erasmus Wilson. The following presentations took place:—Dr. Rutledge, by Lord Rosslyn; Dr. J. B. Thomson, by Lord Malmesbury; Dr. Wylie, by Mr. J. C. Herries.

Statistical Society of London.—Lieut.-Col. W. H. Sykes, V.P., in the chair. Dr. Guy read a paper on the Vital Statistics of Chittagong, Bengal, by Assistant-Surgeon Bedford; and Mr. Farr brought before the meeting a notice of the cholera in England in 1848-9, the discussion on which was adjourned to the next meeting of the Fellows on the 17th May.

City Orthopædic Hospital, Hatton-garden.—At a recent meeting of the officers and governors of this Institution, the Report stated, that the establishment was prospering greatly, and that altogether 582 patients had been cured, or were still under treatment. The first course of lectures on Orthopædia was concluded on the 17th inst.

Medical Society of London.—The Lettsomian professors appointed for the session of 1852-53 are, Dr. Murphy, who will deliver some lectures on points interesting in midwifery, and Mr. Pilcher, whose lectures will embrace some subjects of importance in the science of physiology.

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity.—The sixty-fourth anniversary of the foundation of this Society was celebrated last Saturday, the 17th instant, at the Freemasons' Tavern. Sir Charles M. Clarke, bart., the President, in the chair, the usual loyal toasts having been given, and "The Army and Navy," coupled with the honoured name of Sir James M'Grigor, the Chairman proposed "Prosperity to the Institution," and regretted that the sums granted to the widows and children of members were so small; still the Society had gone on ever since its foundation, increasing steadily though slowly in its numbers, in the amount of its capital, and in the number and amount of the grants for relief. He congratulated the Society on their having now obtained a local habitation at the house of the Royal Medical and Chirurgical Society. Mr. Hedgson proposed the health of the President, Sir Charles Clarke, to whose professional and personal worth he paid a well-deserved tribute of praise. The President expressed his very great regard for the profession to which he had so long belonged, and his especial gratification at meeting the members of this Society on these occasions, and at the Courts over which they had done him the honour of electing him to preside. Mr. Ware assured the members of the interest which the Court of Directors took in the business entrusted to their management, and of the scrupulous regard which was paid to the due administration of the funds. Mr. Stone stated, as an instance of the benefits conferred by the Society upon those who needed its assistance, that a widow was receiving 100*l.* a year for herself and her six children, though her husband had subscribed only ten or twelve guineas during his lifetime. Dr. William Merriman, the acting Treasurer, stated, that a most gratifying donation had been received, namely, 50*l.*, which one of the widows, shortly before her death, had desired might be given to the Society, from a small fund in her possession, as a mark of her thankfulness for the relief which, for many years, she had received from its funds, and which had enabled her to struggle successfully with very serious difficulties. Mr. Walsh, the Secretary, stated that the Society had gradually overgrown the arrangements which had hitherto sufficed for conducting its operations. This had long been partially felt, but had now become quite apparent. He trusted that on Wednesdays, the days of his attendance at the Society's rooms in Berner's-street, he should be honoured with inquiries of many members and others, to whom he could give abundant information as to the Society's usefulness. The subscriptions received amounted to 211*l.* 8s.

Oxford Medical Dispensary and Lying-in Charity.—At the Annual Meeting, recently held in the Town-hall, the Principal of Magdalen Hall in the chair, the Report was read, to the effect, that on the 1st of January, 1851, there were 65 patients on the books, and that 1241 had been admitted since, the total being 1306. Of these, 1022 cured, 65 dead, 145 relieved, 11 sent to the Infirmary, 9 to the parish, and 54 remaining on the books. In addition, there were 158 midwifery cases. Admitted since the foundation of the dispensary in 1807, medical cases, 38,857; midwifery ditto, 5543; total, 44,400. The receipts for the past year were 305*l.* 14s. 2d; the credit side included 80*l.* retained for investment, and a balance of 4*l.*, after payment of the House Surgeon's salary, and of other incidental expenses. The Institution is well supported.

Progress of Epidemics.—By the latest reports it is stated, that yellow fever is very severe at Rio de Janeiro among the shipping, and there have been a few fatal cases on shore. Owing to this, the Tay, Royal mail-steamer, was placed in quarantine at Teneriffe and Lisbon. The crews of foreign vessels are suffering severely. The fever has almost left the Cape de Verde Islands. The small-pox has broken out on board Her Majesty's steam-sloop the Sphinx, Commander Shadwell, on the coast of China, and several men and officers, including both lieutenants, are laid up with it. The gun-room steward has died from the endemic. This disease has also shown itself on board Her Majesty's steam-frigate the Dragon, in the Tagus. The clerk has been attacked by it, and sent to the Naval Hospital at Lisbon.

Poisoning by Laudanum.—Another of these cases was lately made the subject of inquiry before Mr. Baker, the coroner, at Bethnal-green. It appeared from the evidence, that the deceased, an infant nine months old, was put out to dry-nurse, in consequence of its father being seized with small-pox. It was in good health, but restless at night, and the nurse, anxious for a good night's rest, gave it some laudanum at 11 p.m., and another dose at 3 a.m. the next morning. Death followed the exhibition of the poison. The verdict was, "That the deceased died from the effects of an excessive dose of laudanum, administered as a composing draught." The coroner, at the request of the jury, admonished the nurse's two sisters, for having given the laudanum without having obtained medical advice, and observed, that it was out of a merciful consideration of the jury that they did not return a verdict of manslaughter. True mercy and justice would have been administered had such a verdict been returned. Some cases of severe punishment are required to put a stop to the baneful practice pursued by many nurses, of insuring themselves good nights' rest by half or wholly poisoning the helpless babes entrusted to their charge. The restlessness exhibited by the babe is easily accounted for; it was removed from the maternal care—in all probability, from the breast—and entrusted necessarily and properly to hirelings, who undertook to bring it up by hand, and gave it food which more or less disturbed the stomach; for, as all who have had anything to do with dry-nursing infants are well aware, there is scarcely anything so difficult as to find articles of food other than the mother's milk adapted for an infant's stomach. Instead of remedying this by using other aliment, the infant was poisoned, not by one, but by a repeated dose of a powerful narcotic. Laudanum ought to have been included in the Sale of Arsenic Act.

The Woolrige donation fund for the Free Cancer Hospital is now completed. The money thus raised is to be set apart for the maintenance and treatment of in-door patients exclusively.

DEATHS *in the Metropolis for the week ending Saturday, April* 17, 1852.

Causes of Death.	April 17.				Sum of Ten Weeks.
	0	15	60	All Ages.	
All Causes	473	393	222	1092	9436
Specified Causes	471	393	220	1085	9364
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	159	59	14	232	1800
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	3	24	21	48	519
3. Tubercular Diseases	65	128	5	198	1962
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	46	38	24	108	1166
5. Diseases of the Heart and Blood-vessels	6	25	12	43	318
6. Diseases of the Lungs and of the other Organs of Respiration ...	92	52	70	214	1502
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	25	17	13	55	553
8. Diseases of the Kidneys, &c. ...	...	13	4	17	111
9. Childbirth, Diseases of the Uterus	...	11	1	12	106
10. Rheumatism, Diseases of the Bones, Joints, &c.	...	6	5	11	82
11. Diseases of the Skin, Cellular Tissue, &c.	...	...	2	2	11
12. Malformations	4	...	...	4	20
13. Premature Birth and Debility ...	38	3	...	41	212
14. Atrophy	15	1	1	17	156
15. Age	...	...	46	46	533
16. Sudden	1	...	1	3	86
17. Violence, Privation, Cold, and Intemperance	17	16	1	34	227
Causes not Specified	2	...	2	7	72

ORIGINAL LECTURES.

CLINICAL LECTURE

AT

King's College Hospital.

By WILLIAM FERGUSSON, Esq., F.R.S.,

Professor of Surgery in King's College, London, and Surgeon to King's College Hospital, etc.

CLEFT PALATE.

Gentlemen,—We have lately had in the house a number of cases which well deserve some especial notice at my hands in my clinical observations to you. Some of them are important, owing to their ordinary character, while others no less claim your attention because they are chiefly examples of disease and treatment not frequently coming under your notice. To the latter class of cases I shall this day draw your particular attention. You are aware, that within the last few weeks we have had some cases of malformation of the palate, which have excited some interest in our minds, and the more so as you know I have paid considerable attention to the subject of these malformations—a subject, indeed, which has of late years increased both in magnitude and in interest. It would scarcely suit the present lecture were I to dwell at length upon the history of this malformation; but I may say, that the subject of cleft palate was at one time almost out of the field of surgery. It is only within the last twenty-five years that it has been prominently brought forward, and has so much increased in interest as to be looked upon most carefully by those surgeons who were anxious to remedy malformations of the kind. It may, previous to that time, be said to have been beyond the aid of surgery. The only plan which surgeons could devise as of any utility, was to put an artificial palate into the roof of the mouth; and, indeed, this department was chiefly in the hands of the dentists. Since this period, however, it has been found out, that, by a surgical operation, such a modification of the parts may be brought about, as to insure a closure of the cleft in the soft palate. Like as in other important discoveries, it may be said that an accident almost led to this discovery in surgery. A medical student in Edinburgh who was subject to this malformation, went over to Paris at an advanced stage of his pupilage, to finish his professional studies. While there, he saw the celebrated French surgeon Roux, who, in conversing with him, discovered the deficiency, and proposed to endeavour to effect a cure by some operative proceeding. This was readily assented to. Now, Roux thought of treating the fissure in the soft parts of the palate just in the same manner as surgeons were in the habit of operating for a similar condition of the upper lip. He did so in this case, and, the operation succeeding, the patient returned to his native country so much improved, that his friends certainly did not know him by his voice. This, I believe, was the first case ever performed. It was afterwards performed by Graefe, of Berlin, Warren, of Boston, and many others.

During the last twenty-five years, various modifications of this operation have been recommended and adopted by several surgeons, in accordance with their own particular views of treating the affection, or with the peculiarities of each case. However, with the exception of the cases occurring in the practice of Roux, and of one or two surgeons in America, there has not been very great success with this operation. Roux is understood to have operated on upwards of one hundred cases, and to have succeeded in one-third of them; but the American surgeons, Mason Warren and Mûtter, have succeeded better. In this country, it may with truth be said, that the operation had almost fallen into oblivion.

In my younger days I saw several cases of cleft palate in Edinburgh, where operations were attempted, but they turned out very unsatisfactory. The late Mr. Liston very rarely performed the operation; even he, with all his great skill and manual dexterity, was very unsuccessful in these proceedings. About seven years ago a new impulse was given to the subject, in consequence of some views of my own having been offered to the Profession through the medium of the Medico-Chirurgical Society, who honoured a paper of mine, on the subject of cleft palate, with a place in their Transactions; and subsequently there has been more written about the subject than at any previous period. The peculiar and important features in my paper were the announcement and description of the anatomy and physiology of the palate in its cleft condition, and also the application of this knowledge to the surgery of cleft palate.

I had taken up certain views of my own upon this subject, and had made inquiry for the purpose of ascertaining if these same views had been entertained or promulgated by any other surgeon or physiologist prior to myself; but I could not ascertain that any one else had ever described the physiology or the movements of the parts in the cleft palate; in fact, that investigations which had been already made only tended to convince surgeons that they were left in almost utter ignorance of the movements of the parts and of the causes of the movements in this condition.

Now, when you have a person before you whose palate is cleft in two, and you look into his mouth and ask him to imitate the act of swallowing, the edges of the cleft, and more especially of the posterior portion of it, approach each other, and the fissure is much narrowed; and if a spasmodic action of the palate is induced by irritating it, the two portions of the uvula fall together. This movement of course had been noticed by those surgeons who had paid particular attention to the subject; but although it had been observed by them, they had not been able to understand it. Malgaigne, indeed, had referred to this very movement as the one he was perfectly unable to explain. In the investigations I carried on, I fancied I explained this movement satisfactorily; and any one who could see the preparation which I made, and from which I instituted my observations, and would reflect carefully upon the matter, will understand that this hitherto unexplained and difficult point can now be easily and clearly understood. Now, no one had ever thought about the possibility of the sides of the cleft palate being pushed together; but such is the case, for the superior constrictor of the pharynx, from its peculiar situation, and from the disposition of its muscular fibres, has this pushing effect upon the palate, and it is this which causes the sides of the cleft to approach each other. As I have before stated to you, this fact was one of the main features of originality in my paper. All surgeons prior to that time had seen that one great obstacle to the uniting of the wound was the constant dragging of the soft parts. The lateral portion of the palate was so moveable, that there was a constant tension on the stitches; in fact, to a greater degree than exists after the hare-lip has been united. Surgeons knew that this was the great obstacle to the uniting of the wound; but the precise cause of it was uncertain, and remained so until I made my observations. I then announced that the principal muscle which dragged the parts outwards was the levator palati. I also showed that the palato-pharyngeus acted in such a manner as to exert an unfavourable influence on the soft palate. There can be no doubt that this muscle, which, you know, constitutes the posterior pillar of the fauces, acts differently in the cleft state of the palate and in the natural state of parts. In the natural condition it has the tendency to close the posterior part of the fauces, as it draws the parts towards the centre; but when the palate is cleft it acts otherwise; this muscle, indeed, helps to drag the flaps of the palate outwards. Well, from all the inquiries which were made, I came to the conclusion in my own mind, that if the levator palati and palato-pharyngeus muscles were divided preliminary to bringing the edges of the cleft in contact, the parts would be much more likely to lie in apposition, the tension would be taken off the edges of the wound, and the unsuccessful results which had hitherto obtained would in this manner be prevented. In my observations, some other and minor points were referred to, such as the action of the palato-glossus and tensor palati, which were shown by me to have but little action. It would, indeed, appear on first consideration, that this latter muscle would have a powerful effect upon the soft palate; but if you examine this muscle carefully in the cleft condition of the palate, or in the natural state of parts, you will ascertain that in reality this so-called tensor has scarcely any action at all upon the soft parts, while, on the contrary, you will observe, that the levator palati is the muscle which principally acts in pulling the flaps of the cleft upwards and outwards.

I must here mention, that some of the incisions which were recommended by some surgeons had nearly accomplished the object which I have in view; for instance, the incision of Dieffenbach, which was made through the whole thickness of the palate on each side of the cleft, most likely

involved the levator palati muscle; that Dr. Mason Warren probably included a portion of the palato-pharyngeus; but still there never had been made the slightest allusion to the anatomy of the parts by these surgeons, and, in their operations, there could be no scientific or anatomical precision. But, in the proceeding which you have seen me adopt, I know what particular textures I divide, and I know for what reasons I divide them, and the results of my operations have been most satisfactory; and hence I cannot help thinking that the method is the most correct one, and I must strongly advise you to follow it.

There is one point of very great importacce, in connexion with the after-treatment of these cases, upon which I also forcibly dwelt. It was formerly the custom not to allow the patient to take any food for some two or three days after the operation, for fear of the muscular action which is necessary to swallowing disturbing the union of the parts; in fact, the patient was literally starved,—so that the remedy became worse than the disease. However, I determined to allow my patients food as soon after the operation as they chose to have it; of course, it was given to them only in a fluid form. I found the great advantage of this plan, and strongly inculcated its observance. I must, however, do Sir Philip Crampton the justice to state, that he had resorted to the same measure occasionally before. In, however, recommending that the patient should take food immediately after the operation, I must beg you to understand, that I do not allow my patients any solid nourishment, but only food in the shape of fluids, such as broth, beef-tea, and arrow-root.

Now, we have had two very interesting cases of cleft palate in the house lately, and you have seen me adopt the particular mode of operation above referred to in both instances, and in each of them the result has been everything we could have wished. In the first case I operated on,—both of them were young men,—the fissure only went through the soft parts, so that it was a most favourable case for an attempt to close the opening; but the second case was somewhat complicated, as the cleft implicated the hard as well as the soft palate. Here, moreover, there was a bridge of communication of soft tissue in the centre, so that the fissure was divided into two almost equal portions. This condition was probably an advantage; so I determined to operate only upon the hinder portion first, and this I did in my usual manner; and you have all seen how very favourably union has taken place. The patient is now to go into the country, and is to return at the termination of a few months, when it is my intention to perform an operation upon that portion of the cleft which still remains open. In the case first mentioned, where the cleft was much less extensive, I performed the same kind of operation, having divided the levator palati muscle on each side, prior to bringing the edges into contact; and the result was a perfect cure.

Now, you must all notice what a difference there is as to the sensitiveness of individual patients, and the power of bearing the operative process. In one case we have an immense deal of trouble, in consequence of the excessive irritability of the parts, and the want of firmness on the side of the patient. In another instance we shall find just the contrary, and here the operation is rendered comparatively easy, although it is a difficult one under any circumstances. Now, in the second case you saw this exemplified; the young man was firm and determined to bear the necessary process with patience, and the parts were by no means so irritable as they are usually found to be; consequently, there was little difficulty or delay here, and indeed everything has turned out as well as we could possibly wish.

Now, gentlemen, before concluding this subject of cleft palate, I will contrast these two very fortunate cases with a case which is now in the house. I am speaking of the young woman, upon whom I operated last Saturday. Here was a deformity in the velum, but it was not the usual congenital deficiency I have been speaking to you of. She had an aperture in the soft palate, which was so large as to admit the little finger into it, and it had been produced by disease. It is generally the custom to close these artificial openings by small plugs of different materials; and much ingenuity has been displayed in their construction and adaptation. In this instance, however, I thought I would endeavour to close the opening by an operation. You saw that I brought the edges of the opening well together, and accurately adapted them by sutures, and for the first forty-eight hours the wound looked well, and appeared as though it would heal; but unfortunately it has since broken open, and the patient is as bad as she was before. I must tell you, that in cases of this description, where there is an opening in the soft palate produced by disease, for the most part syphilitic, there is very little chance of doing good by an operation. I have tried on various occasions to close openings of this nature, but cannot flatter myself with being successful.

ORIGINAL COMMUNICATIONS.

EXCISION OF JOINTS.

By G. M. JONES, Esq.,
Surgeon to the Jersey Hospital.

[Continued from page 289.]

Case 2.—John de Ste. Croix, a short-set muscular man, aged 38 years, by trade a whitesmith, was admitted into the hospital on the 17th March, 1851, with disease of the left elbow-joint, ten days before which I had visited him at his house, and there learned the following account of his case:—

Upwards of three years ago he experienced pain of a lancinating kind in the elbow, and shortly afterwards perceived two small lumps, which occupied, according to his statement, one the radial, the other the humeral portion of the joint. This induced him to consult his "club doctor," who with a lancet abstracted from a vein a quantity of blood, as a means of removing this local affection. The pain not subsiding, he applied to various other medical men, whose prescriptions he followed, and occasionally with apparent benefit, nor did he refuse to listen to and adopt the advice of quacks. He was not aware of having received any injury or hurt; but, from the time he first suffered in the elbow, he had never for many days together been exempt from pain, which frequently prevented his working; and at one period he had to lay up for six weeks. The pain was almost always more acute during the night, and would often wake him. It was, however, only one week before I was called in that serious symptoms manifested themselves, the whole arm, but more particularly the joint and its surrounding parts, becoming almost suddenly inflamed, and the pain attending it excessively severe. His sufferings at this time were most distressing; the whole arm, from the shoulder to the fingers, was in a state of phlegmonous erysipelas, and measured nearly twice the size of the corresponding limb. There was a small opening, not much larger than a pin's head, about one inch below the head of the radius, and another full two inches above the external condyle of the humerus; fluctuation was most distinct, so that I at once enlarged one of the openings, in order to give the matter free exit; a quantity of ill-conditioned pus escaped, and comparative relief followed. From this time till his admission into the hospital, irritative fever ran very high; tongue coated; pulse 130; and perspirations so profuse, as to render necessary a change of linen every four or five hours. The plan of treatment followed was that generally adopted in cases of this nature.

The erysipelatous affection having considerably lessened when he was admitted into the hospital, a more careful examination took place than had up to this time been deemed prudent. Any attempt to move the joint gave excruciating pain, the effort, however slight, occasioning, to use the patient's own expression, "the bones to rub one against the other." A probe introduced into either of the openings above alluded to at once proved that carious bone existed, and burrowing sinuses could be detected running in all

directions not only near the diseased articulation, but in parts some inches removed from it. The integuments of the whole arm were, however, in such a state, that local treatment seemed absolutely required before any operation could with much prospect of success be resorted to; but a train of symptoms, dangerous from the extreme debility they were occasioning, prompted me (with the concurrence of my friends) to remove without further delay the cause, which was not only rapidly undermining an otherwise healthy constitution, but threatening life itself.

In this case of excision (the operation was performed on the 30th of March) I followed, as nearly as circumstances allowed, the plan laid down and adopted by Syme. The dreadfully diseased state in which I found the bones of the joint, as well as the surrounding soft parts, excited a doubt whether, after all, amputation, if not the more justifiable, would, at all events, prove the safer course to pursue; but, knowing from experience that Nature can effect very much more than she is generally given credit for, I determined to test her powers in this instance. The integuments throughout were in a much greater state of disease than I had in the least anticipated; it was like cutting through a soft gelatinous and pulpy substance. The under portion of each flap, and other of the surrounding parts of the entire joint, were in some places so diseased as to make it necessary here and there to remove pieces with the knife. Both ulna and radius at their connexion with the humerus were carious, and the latter bone, to the extent of 1¼ inch, very much so. There was not only complete destruction of the articulating surfaces, but some portion of the substance of the bones participated in it also. The operation, which was rather a tedious one, was completed with but very little hæmorrhage, the flaps were brought together by means of sutures, (the state of the integuments permitting but little reliance to be placed on them,) and the arm laid in a semi-bent position.

About an hour after the operation, ʒij. of tinct. opii were given, and beef-tea ordered to be frequently taken.

9 p.m.—Has experienced nausea several times; feels restless; pulse 135; thirst; tongue moist; has had no sleep; considerable pain in the arm.

Saline draughts, with ♏x. of tinct. opii, to be taken every three hours.

31st mane.—Has had some sleep during the night. Pulse quick, but more quiet than yesterday; a cold, clammy sweat over the body.

A glass of port wine every three hours, preceded by ʒj. of quinine mixture. Beef-tea and other nutritious diet to be occasionally taken.

Vespere.—Much the same as this morning.

April 1st, mane.—Slept at intervals during the night, perspirations very severe for three or four hours; pulse very weak, and 135; tongue rather coated and inclined to be brown; feels but little pain in the arm.

Two and a half grains of quinine every three hours, and a pint and a half of port wine to be taken during the twenty-four hours.

Vespere.—Pulse 120, and stronger; enjoyed a dinner, consisting of roast chicken; tongue moist.

2nd mane.—External dressing removed; wounds have discharged a great deal; general appearance unhealthy; pulse 114; slept full five hours during the night; tongue much cleaner; appetite good; perspired very much towards morning.

Continue the same. A bottle of porter in addition to wine.

Vespere.—Has passed a tolerable day.

3rd mane.—Bowels acted on for the first time since the operation; slept several hours during the night; pulse 96, and soft; copious discharge from the wounds, unhealthy in appearance; adhesive straps removed, the integuments for some extent dark coloured, and when pressed on have a pulpy feel, at the same time a considerable quantity of fetid pus, much tinged with blood, bubbled out; sutures came away with the dressings.

Two adhesive straps applied for the purpose of support, and water-dressing. Diet of the most nutritious kind to be taken, in addition to the port wine and quinine.

Vespere.—Has eaten very well during the day; feels much more comfortable than he had yet done; pulse tranquil; tongue clean.

4th.—Discharge from the wounds still very copious, and unaltered in character; the lower arm much swollen, and in some parts, particularly on the radial side, hard: experiences but little pain, has slept well, and relished a meat breakfast exceedingly; pulse 90, and much improved in strength.

The water dressing to be applied over the whole of the forearm, as well as on the diseased parts; bowels acted on twice; evacuations natural.

5th.—Has, for the first time, found the perspirations less; slept almost the whole night; discharge from the wounds less copious, and more healthy; granulations here and there florid; the forearm less swollen.

Continue the same.

6th.—The same as yesterday.

13th.—From the 6th to the 13th, his appearance and general health have daily improved; he has slept well; bowels regular; appetite very good; perspirations trifling; pulse 90, sometimes 94. The discharge from the arm still continues very considerable; some portion of the inner longitudinal incision has healed by first intention; it is, however, evident that every other part will heal by granulation, and equally so that, in consequence of the diseased state of the integument, a considerable time must elapse before the sinuses can close, and healthy integument supply the place of that which was and still is so disorganized.

Water-dressing to be continued. The arm was this morning placed in an appropriate splint, and the patient was allowed to sit up.

20th.—The arm, since the last report, has gradually improved; it is rather painful and tender in two or three parts, but more particularly in one spot, about three inches below the removed portion of the ulna; pulse almost natural, both as regards frequency and strength; there is considerable œdema, extending from the wrist to the bend of the arm; very little above. He can move his fingers with more facility than he had yet done.

The same local treatment to be continued, and the many-tailed bandage to be applied rather tighter; the diet to be still of the most nutritious nature, and wine, quinine, and porter to be taken as before.

30th.—Wounds are filling up, though slowly; the œdema has considerably subsided; feels much stronger.

The same treatment to be continued.

May 10th.—There is still considerable discharge; the sinuses are evidently closing, and the general aspect of the parts more healthy. The forearm is its natural size; the arm smaller.

The water dressing to be continued: port wine to be reduced one-third; quinine also; porter or ale to be taken as before.

29th.—From the 17th April to this date he had been up daily; had frequently left the hospital for hours together, and occasionally for the whole day. The night before last he remained out later than usual, in consequence of the weather, and returned to the hospital with his clothes wet. During the night he felt chilly and unwell, and is now very feverish; skin dry; tongue coated; pulse hard, and 96; coughed several times during the night, and the sputum, which was at first tenacious, is now uniformly of a rusty colour; breathing difficult, and any attempt at taking a long inspiration causes instant cough, and very great pain in the right side.

Thirty ounces of blood were at once abstracted from the arm, a blister applied to the side, and an aperient powder given. Linseed-tea to be taken *ad libitum*.

Vespere.—Breathing still continues difficult, coughs much, sputum streaked with blood frequently. The blood abstracted in the morning is highly inflammatory. Pulse softer, 104. Bowels have been freely acted on five times; thirst very considerable, has drunk very largely during the day; blister has risen.

℞ Ant. tart. gr. viij., tinct. opii ʒij., nit. pot. ʒij., mist. camph. ʒviij. M. Cap. cochl. mag. ij. sum. quaq. quartâ horâ.

30th.—Cough much less than yesterday, expectorated freely, sputum much less tinged. Has had some sleep; skin moist; pulse 90, and soft; still experiences much thirst; tongue coated, but not dry; the appearance of the arm much the same as at last report.

By following up the antiphlogistic treatment for several days, and having recourse to derivants and expectorants, milk diet, etc. etc., the pneumonic symptoms gradually sub-

sided, so that on the 28th June he was, at his own request, discharged as an in-door patient; cough, expectoration, and all pain, both in the side and chest, had left him. The healing of the arm, though progressing favourably, has evidently received a check; still there is nothing to indicate an unsatisfactory termination.

Ordered to attend at the hospital every second day.

Sept. 25.—The arm may now be looked upon as cured; for some time past the discharge has been so trifling as scarcely to soil the lint; at present there is none whatever; several of the wounds have so cicatrised as scarcely to leave the least scar. The arm can be easily straightened, and there exists but little doubt that in a few months he will be able to bend and straighten it at pleasure.

Last Report.—This patient has for some time past followed his usual employment, and is able to earn very tolerable wages: he finds his arm become daily stronger, and can now use it to dig, carry pails of water, etc.

I have omitted mentioning that Ste. Croix was at one time a great pugilist, which renders it probable that either a blow or a fall occasioned the disease which led to the resection of the elbow-joint.

Case 3.—On the 4th June, 1849, John Le Gros, a boy nearly nine years old, was admitted into the hospital in consequence of an affection of the left knee, the result of a kick he had received three weeks before from one of his school companions: this was not attended to at the time, nor had any remedy been employed. When I saw him the affected joint was much swollen, and was attended with symptomatic fever of the inflammatory kind; perfect rest was enjoined, and the antiphlogistic treatment followed out both in a surgical and dietetic point of view. At the expiration of a month the knee regained its normal size, and, although the danger attending an early removal from the hospital was pointed out to the patient's mother, she persisted in his being discharged, and her wishes were accordingly complied with. Five months after he again became an inmate, and for the same affection; local and constitutional remedies were once more resorted to, and apparently with advantage, for in six weeks there was evidently an amelioration of symptoms. Without my consent or knowledge the boy was removed, and from that period to the 6th April, 1851, I entirely lost sight of him. On that day I was requested to visit him, and learned that he had been able to walk tolerably well for a month or two after leaving the hospital, but was at length obliged to have recourse to crutches. Iodine ointment was the sole application which had been used, and that only for a short time. The poor boy was to all appearance sinking from irritative fever; pulse small, and upwards of 130; emaciation very great; features attenuated, and the whole body had a cold, clammy feeling; his nights were either sleepless or extremely restless. The affected knee was very much swollen, and had an elastic feel; any attempt to move the joint gave excruciating pain, and this, together with the extreme tenderness of the part, left little doubt that extensive disease of the joint existed. The skin was considerably raised from the patella to rather more than half up the thigh; the swelling had a conical form, and, as fluctuation was very perceptible, the fluid, of which there was a large quantity, was at once evacuated by means of an opening made in its most projecting point. This gave temporary relief, but as the hectic symptoms daily increased, and also the diarrhœa, (which was of some standing) and the mother had no means whatever of supporting her child, he was, on the 14th of the same month, admitted for the third time into the hospital. From this day to the 27th every attempt was tried to strengthen the system, and this was in some degree accomplished by means of nutritious diet and tonics combined with astringents. The discharge from the thigh, however, increased rather than diminished, as also the emaciation of the whole body, so that it was evident there remained no chance of saving life except by amputation or excision of the joint. In the wretched state of the patient neither offered much hope of success, but the unwillingness of both mother and child to have the leg removed decided that the latter plan should be attempted.

On the 27th of April, in presence of several of my medical friends, I excised the joint, following almost throughout the operation the same plan that had been adopted in Sarah Hansford's case. As in hers there was but little hæmorrhage; no vessel required a ligature; there was a considerable quantity of matter within the joint, and not only the articulating surfaces were destroyed, but much also of the substance of the bone was found to participate in the disease; the ligaments, also, were partially disorganised, and the under part of the patella partook in the general affection. The portion of bone removed from the femur and tibia measured 2¼ inches. The operation lasted seven minutes; the edges of the wounds were brought together by means of sutures, and the limb was secured in a box with pads, etc. etc. A state of great exhaustion followed the operation. Two hours after thirty-five drops of tinct. opii were given, and strong beef-tea and port wine ordered to be taken frequently.

Vespere.—Apparently but little oozing from the wounds; pulse exceedingly quick, too much so to be accurately counted; complains of excessive pain, has had no sleep, and feels restless and exhausted; the whole body covered with a cold clammy sweat; the kidneys have acted freely.

℞ Tinct. opii gr. xl., tinct. card. co. ʒiij., mist. camph. ʒiss. M. ft. Half to be taken immediately, the other half in two hours, should the pain continue.

Port wine to be taken frequently.

28th mane.—Took both portions of the draught, but had very little rest; suffers much less than last evening; temperature of the limb not greater than might be expected. Pulse 140, small; tongue coated, but moist; perspirations as great as ever; no appetite.

Two grains of quinine, and one glass of port wine, to be taken alternately every three hours, and strong beef-tea to be given frequently.

Vespere.—Pulse rather stronger than in the morning, and 135; tongue less coated; perspired most profusely from four till six. Has taken the quinine and wine regularly, but very little beef-tea.

29th mane.—Has passed a sleepless night; pulse as last evening; had a natural evacuation during the night; tongue much cleaner, and perfectly moist; cheeks hectic; perspirations in no degree lessened. The leg seems to lie comfortably, and is by no means painful.

Ordered cocoa for breakfast, and a chop for dinner. Medicine and wine as usual.

Vespere.—Ate but little for dinner, and is in every respect much the same as in the morning.

30th mane.—The bandages and dressings were removed this morning. The aspect of the wounds showed that but little, if any, would unite by the first intention. Some of the sutures were removed. The discharge was copious, moderately thick, and, although in character not everything that could be desired, was not worse than was to be expected. That from the opening in the thigh was abundant. The water-dressing to be applied, together with moderate pressure over the whole limb, from the ankle upwards. Considerable exhaustion followed this dressing, which the extreme nervousness and timidity of the boy were in themselves sufficient in a great measure to account for.

Vespere.—Has passed a more quiet day than he had done since the operation. Pulse 132, small, but regular; perspirations as great as usual; enjoyed some roast duck for dinner and is tolerably cheerful.

Wine, quinine, etc., to be continued.

May 1st, 9 a.m.—Has had six copious watery evacuations since six o'clock; is looking wretchedly ill. Pulse 140, very thready and flickering; tongue dry, but not coated.

To take frequently arrowroot, with brandy in it, and a table-spoonful of an astringent mixture every two hours; and when thirsty, port wine and water, or rice water with cinnamon and brandy in it.

Vespere.—Bowels have only been acted on twice since the morning; evacuations less copious, and more consistent; pulse equally frequent, but not so weak; features not so attenuated. The leg was dressed at mid-day, and appeared much the same as yesterday.

Mixture to be taken every five hours.

Arrowroot, etc., the same.

2nd mane.—Has slept but little, and that little was much disturbed. Pulse very weak. Two evacuations during the night, not copious. Complains of great pain all down the leg. Integuments about the wound very puffy, particularly on the outer part. Several of the sutures came away with the dressing. General appearance of the parts unhealthy. Considerable discharge of ill-conditioned pus from the sinus in the thigh.

A glass of port wine every three hours.

℞ Mist. cretæ comp. ʒi., quinæ sulph. gr. ij., tinct. card. co. ʒss., ft. haust. quâq. quartâ horâ.

Vespere.—Bowels have not been acted on during the day; pulse 132, stronger than in the morning; perspirations very considerable. Relished two cups full of beef-tea, and broiled meat.

Continue the same.

7th.—From the 2nd to this day there has been but little improvement, with the exception of the bowel complaint, which has not returned. Appetite very bad; tongue clean; pulse 130; perspirations very profuse; discharge from the wounds rather more healthy than at last report, but very abundant. This morning there is less pain in the leg, and he seems more cheerful than he has yet been. Has not the least appetite for meat or broth.

The same quantity of quinine to be taken, but in powder. Chalk mixture to be omitted.

As much milk as he fancies.

14th.—The wounds this day assumed a more gratifying appearance than they had yet done. Pulse for the first time under 130; tongue clean; countenance much less expressive of pain and anxiety. The discharge also from the wounds, and from the sinus in the thigh, less copious, and of a more healthy character. Sleeps better, but very far from well. Perspirations have not lessened; more emaciated than ever.

Continue the same, and pale ale to be taken three or four times during the twenty-four hours.

18th.—Complained of occasional rigors during the night, and was unable to sleep in consequence of pain along the outside of the leg. Pulse rapid; a shining blush of some extent on the part complained of; wounds have discharged much as usual; edges have a moderately healthy appearance. Appetite improved.

A linseed poultice to be applied to the painful part.

19th.—Night has been sleepless, in consequence of a throbbing pain extending almost all down the leg. Pulse 128; cheeks hectic; has perspired more than usual.

Full a tablespoonful of laudable pus was evacuated by means of a lancet from an abscess which had formed about an inch below the external transverse incision. This gave instant relief. The wounds are filling up, though slowly, with healthy granulations; sinus in the thigh still continues discharging; three or four very small sequestra of bone which were visible were withdrawn by means of the forceps.

Hot-water dressing to be applied. Citrate of iron cum quinine to be taken every four hours, and as much nutritious food as the stomach can bear.

30th.—Another abscess, situated about two-thirds up the inner part of the leg, was this morning opened. The matter which flowed from it was thick and healthy. All the other wounds are going on favourably.

Treatment to be continued in every respect the same.

June 10.—Health has gradually improved since last report. A copious discharge still continues from the different wounds, and more particularly from the one caused by the abscess, which was opened on the 19th. Perspirations equally great when they occur, but not so general nor so frequent. Appetite much better. Has taken for some days past upwards of three quarts of milk during the twenty-four hours. There is not, nor has there been, the slightest œdema of the foot or leg. Pulse 100; still very weak, but regular. Bowels opened once a day. Wounds cicatrising.

Diet as well as medicine to be continued.

The body and limbs to be sponged night and morning with the pyroligneous acid lotion.

25th.—Every day for the last fortnight has been taken down, and remained for several hours each day in the open air; countenance has lost all expression of anxiety; and, though the emaciation is still very great, it is evident that for some time he has gained flesh. Pulse 90, and moderately strong; appetite quite as good as at any time during the last two years. Two other abscesses have discharged, both situated in the popliteal space; neither are deep, and they seem to have arisen more from some undue pressure than from any other cause; discharge from wounds and sinus in the thigh much less.

Water dressing to be continued.

Wine, pale ale, and medicine as usual.

July 10th.—Very considerable improvement has taken place since the last report; there is no œdema whatever, and the sinuses are healing. There is another opening, self-made, at the under-part of the leg; very healthy pus issues from it, as well as from other parts not yet healed; appetite is very good, and he relishes his meals; pulse 80 and firm; tongue clean; perspirations have altogether left him, and his nights are very good.

Same treatment to be continued.

August 1st.—Union of the femur and tibia has decidedly taken place; the head of the former bone is distinctly felt moving under the finger when rotated from the foot, and the whole limb is raised easily by the patient with but very little help. The sinus in the thigh still discharges; health is evidently improving daily. The leg is inclined to bow outwards, and is somewhat bent.

Treatment the same; and the box to be so padded as to keep the leg as straight as possible.

25th.—Is now quite convalescent. The discharge from the different wounds is very trifling; some have healed.

Last Report.—Is now able to walk a considerable distance with the assistance of a stick; and it is probable that in a short time he will not require even this support. The limb still bows outward, but not so much as it did. The bend before mentioned, I conceive, facilitates his walking. He can with ease support his whole body, which is now in excellent condition, on this leg. Three or four superficial ulcers still keep up a slight discharge; but there cannot be a doubt that, as the improvement of the constitution advances, these nearly healed ulcers will disappear.

[To be continued.]

PRACTICAL OBSERVATIONS ON DISEASES OF THE EAR.

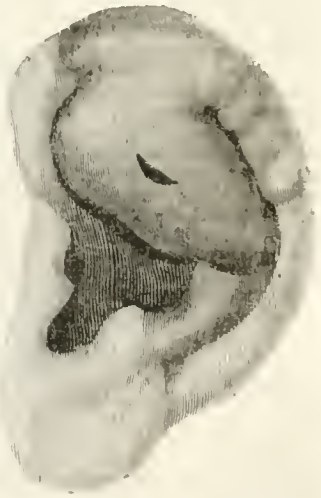
WITH RECORDS OF CASES TREATED AT ST. MARK'S HOSPITAL, DUBLIN.

By W. R. WILDE, Esq., F.R.C.S., Etc.

(Continued from page 315.)

No. 18.—TUMOUR OF THE AURICLE.

J. E., 24, male; a printer. A tumour, about the size of a small pear, occupies the upper portion of the left auricle, between the helix and the concha. It is immovable, and has a tense, elastic feel, like that of a hydrocele, and the skin covering it is smooth, and of a dusky red colour. It is of three months' duration, and has been several times lanced by a medical man, and a quantity of glary matter discharged. As soon as the wound healed, the fluid re-accumulated. Hearing unimpaired. The whole auricle is very hot, but the pain is not great. The case, when admitted, presented the character shown in the accompanying illustration.

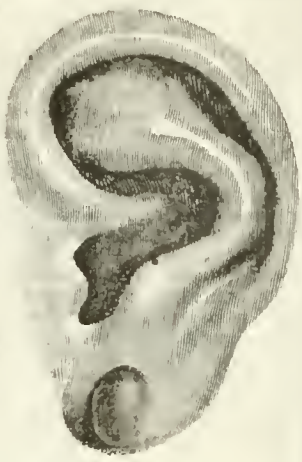


A free incision was made through the entire length of the tumour, and about two ounces of glairy tenacious fluid, of a yellow colour, like that contained in a ranula or an enlarged bursa, but mixed with portions of flocculent matter, was discharged. The sac was found to be smooth and polished. The wound was dressed from the bottom, with dossils of lint and a cold lotion applied to the auricle. Under this plan of treatment, the fluid did not again accumulate, but the auricle presented a hard, thickened, nodulated feel and appearance, which remained for months, and completely effaced the natural curvatures and sinuosities of that portion of the external ear. The patient, while he remained in attendance at the Institution, took Plummer's pill and bark, and had the thickened auricle painted over with tincture of iodine every third day. This is a rare form of disease in man, but I have frequently seen it in dogs, where it forms a hard lump attached to the end of the long flexible auricle. In one instance that I remember, it caused so much inconvenience to a valuable pointer dog, that it had to be excised.

No. 19.—FIBROUS TUMOUR OF THE LOBE.

M. S., 19, female, has a hard, firm, ovoid tumour, occu-

pying the centre of the lobe on each side, but largest on the left, of which the accompanying woodcut affords a faithful representation. It is of a stony hardness, and is quite distinct from the cartilage above, and the fleshy part of the lobe, which it appears to pass through. The skin covering it is smooth, and of a light pinkish hue, like that of a keloid tumour. It grew gradually from the orifice made for holding the ear-ring, and has been several months attaining its present size. The tumour upon the opposite side, which also surrounds the hole made for the ear-ring, is much paler in colour and not larger than a garden pea. The girl states, that she experienced a great deal of pain and soreness in the wound made in piercing her ears, and that about three or four months afterwards she was obliged to remove the ear-rings on account of the irritation they produced. The large tumour was dissected out, and the eliptical aperture left in the lobe brought together with sutures. It healed kindly, and the disease did not return. A section of the tumour exhibited a dense yellowish white fibrous appearance, and was so hard, that the nail made little impression upon it. I saw this patient about three months ago, and as the excrescence in the lobe on the right side had not increased, she was unwilling to have it interfered with.



If tumours of this description were frequently to follow the irritation caused by piercing the ears we should find them much more common, particularly among those nations who wear very large, heavy, pendulous ornaments there; but I have frequently seen the hole made to hold the earring elongated to a slit three quarters of an inch long in some of the African and Oriental tribes. The South Sea Islanders, as you are aware, introduce pieces of wood, shells, and other large substances into apertures made in the lobes.

In a case of goitre, where the tumour extended over the side of the neck along the course of the mastoid muscle, which I remember seeing in the west of Ireland some years ago, the lower portion of the auricle was enlarged to the size of the palm of the hand; and we read that pendulous tumours, growing from the external ear, are not unfrequent in those parts of India where goitre prevails. Mr. Williams, in his Treatise on the Ear, relates a case of tumour of the lobe which was removed by Professor Syme, and which, from the description, would appear to be very similar to that which I have described. Dr. Graves has published a case of fatty deposit in the lobes in a gentleman who died of fatty degeneration of the liver. The same eminent authority has also related a case of gouty congestion of the ear, apparently caused by metastasis. Swellings of the auricle are said to be common among lunatics, but I have no experience thereof. Boyer, in his Treatise on Surgical Diseases, has related a case of a large pendulous lobe, which he removed.

No. 20.—CLOSURE OF THE MEATUS AUDITORIUS EXTERNUS.

T. S., female, aged 54, has become deaf gradually during the last three or four years—tinnitus aurium. No pain or soreness in the ear. There is but little to be learned from the history of this case. A glance at the external ear affords us a tolerably good idea of the cause. Upon looking at the external meatus we perceive that it has lost its usual ovoid shape, and has become a mere elongated slit, or fissure marked by a dark line where the incurvated edges are in contact. Upon drawing forward the tragus, you perceive that I rather increase the defect, but upon grasping the auricle between my finger and thumb, immediately above the little protuberance called the anti-tragus, and drawing it outwards and a little forward, you see that I can to a certain extent restore to its natural size and position the external auditory aperture. The hollow formed between the tragus and the external meatus is much larger and shallower than natural; and on pressing with the finger in front of the tragus and beneath the zygoma, where the skin is rather corrugated, we are unable to push the tragus backwards into the concha so as to cover the meatus externus, to which in normal cases it ought to act as a sort of lid or operculum. Upon examination with the speculum, we find the flexible walls of the auditory tube compressed, the lining of the passage white, and its cuticular investiture thickened as if by maceration and detached in patches, while a slight, whitish, curdy discharge collects round the edge of the tubular speculum. The tympanal membrane is white, and apparently thickened. There is no evidence of ceruminous secretion in any portion of the passage.

Upon enlarging the external meatus, either by the means which I first pointed out to you, or by the introduction of the speculum, you observe that the hearing is increased. She can now perceive the ticking of the watch at six inches. Previously she only heard it when pressed against the auricle.

Closure of the external meatus may arise from a variety of causes, of which you have examples in the series of drawings now exhibited. In the instance before us, it does not seem to be the result of any inflammatory process, but appears to have been caused by some force gradually exerted upon the tragus, and drawing its point forward toward the cheek, and pressing its base backwards—possibly permanent spasm of the tragicus muscle. It is a very slow and gradual process, and is, therefore, seldom attended to by the patient, until complete closure of the meatus ensues. The deficiency of cerumen, the thickened cuticle, and the slight discharge which you observed in the passage, are the result, not of the original disease, but the subsequent closure and pressure of the sides against each other. It is a disease of middle or advanced age. Although it attacks one ear first, it is generally found in that on the opposite side. It is most difficult to manage. I have had thoughts of making an incision in front of the tragus, so as completely to divide any muscular fibres which might have produced the deformity; but I fear that plan would not be attended with much success, for I have, from long experience, remarked, that when once any of the free cartilages, as of the eye-lids, nose, or auricle, become viciously bent or distorted from their natural position or curvature, that it is almost impossible to restore them by any effort of art. I have used tents made of compressed sponge for the purpose of gradual dilatation; but I cannot say that I have effected much thereby. They should, however, be given a fair trial in every case. The tube ought to be cleansed from those impurities which you observe have collected therein, and the parts washed over with a strong solution of nitrate of silver, and a fresh tent should be introduced every night, and removed in the morning. With intelligent persons, in the upper ranks of life, this plan of treatment, if proceeded with for a sufficiently long time, may be attended with benefit; but, with careless, stupid people, among the lower orders, who pay little attention to cleanliness, we have but a slight chance of success. The defect of hearing arising from this (in the first instance) mechanical cause is one of the few cases that may be relieved by the introduction of a small metallic tube shaped like a wine-funnel. You see those constantly advertised as a means of relieving every description of deafness. I need not tell you, from the rarity of the peculiar disease to which they are applicable, in how very few cases they can afford relief; but, as they are silver-gilt, are sold in very neat morocco cases, and cost a guinea and a half, they serve the purposes for which they are advertised by their proprietors. Several years ago I had under my care a case of this description, in a very intelligent old gentleman, and having made an accurate wax cast of the concha and meatus, while the latter was drawn open, as I have just described to you, my friend, Mr. Grimshaw, made the silver plate which I now show you, and which fitting accurately to the parts gave no inconvenience, was not remarkable, and very much improved the hearing. Pads have been constructed to fit behind the ear, and press the auricle forwards; but they do not afford the desired relief. Persons who are aware of the cause of their deafness do not, when speaking to you, place the half-closed hand behind the auricle, in order to collect sound, but very soon learn how to enlarge the meatus, by drawing the auricle outwards and a little backwards.

In ordinary cases of otorrhœa, particularly where the discharge is profuse, the meatus is often rather larger than natural, and the excoriations which sometimes occur where the matter is of an ichorous character, being always more or

less moist, and not forming crusts and scabs, do not produce any contraction of the external aperture; but other cases occur where the meatus is closed by morbid growths, of which the following instance is an example.

[To be continued.]

CASES AND OBSERVATIONS

ILLUSTRATING THE THERAPEUTIC EFFICACY OF

DILUTED HYDROCYANIC ACID

AS A TOPICAL APPLICATION IN CERTAIN

AFFECTIONS OF THE EYE.

By JAMES VOSE SOLOMON, Esq., M.R.C.S.,

Surgeon of the Birmingham Eye Infirmary, late Surgeon to the Birmingham General Dispensary.

[Continued from page 369.]

STRUMOUS OPHTHALMIA OF SEVENTEEN WEEKS' DURATION CURED IN LESS THAN THREE WEEKS.

TREATED BY DILUTE HYDROCYANIC ACID AND IRON.

Case 6.—Upon the 25th of February, 1842, I was requested to visit E. L., a little girl 7 years of age, the daughter of persons in a respectable station of life, some of whose children had died of scrofulous complaints. On arriving at the house, I found my patient sitting in the corner of a small and dimly-lighted back room, with her face turned towards the wall, playing with some toys. I was informed, that this had been her habit for the last sixteen or eighteen weeks; a stronger light was insupportable.

The child is pretty, of lively disposition, has regular features, and a pink and white complexion. There is no enlargement of the glands of the neck; the hair of the head is dark brown, cut short, and interspersed with hypertrophied follicles filled with caseous matter. The follicles inflame, ulcerate at their apices, and shrivel up. The eyelashes are well grown and silky-looking. The appetite is good; bowels generally relaxed. The conjunctivæ of the inferior palpebræ are streaked by a few straight vessels; the right cornea presents a pearl-coloured opacity; that of the left appears to be normal.

History.—In the course of the last five years, she has suffered from five attacks similar to the present one, the duration of each one averaging from four to six months. She has been treated by distinguished ophthalmic practitioners in Dublin and Birmingham, in the opinion of her parents with little benefit.

Treatment.—The hair to be cut short. A large shade to be worn on the forehead. The eyes to be frequently fomented with warm poppy decoction. Two or three drops of dilute prussic acid to be applied to the eyes night and morning. A small dose of castor oil to be taken at bed-time. A light and nutritious diet.

Feb. 26.—Can open her eyes, and bear a moderate degree of light. The castor oil has operated freely; the alvine evacuations are bilious. The application of the drops is reported to occasion trivial pain, which disappears in the course of about twenty minutes, and is succeeded by a greater degree of ease and tolerance of light than was experienced before their introduction. The photophobia was relieved in an hour after the first application of the acid.

Feb. 28 (the 3rd day of treatment).—The improvement in the tolerance of light is still more marked; the child now looks cheerful and happy.

℞ Tinct. ferri sesq., tinct. conii aa. ʒss., aquæ carui ad ʒvi. M., s. cochlear. duo larga ter in dies.

℞ Hyd. c. cretâ gr. j., pulv. ipecac. co. sodæ bicarb. exsic. aa. gr. ij. Ft. pulvis omni nocte s.; mitte doses tres.

March 18 (the 3rd week of treatment).—During the last fortnight, my little patient has been residing in the suburbs, and has spent most of her time in the day, as directed by me, in the open air; she has left off her shade, and can bear as strong a light as other persons. All the functions appear to be well performed.

Remarks.—This patient's eyes have continued, ever since this period up to the present time, perfectly well, with the exception of the occasional appearance of a hordeolum.

She is now (Nov. 1851) of robust contour, in good health, and much stronger than any of the other children of the family.

The history of this case is deserving of attention. We learn from it, that the child's enjoyments of the external world had been, for the last five years, curtailed more than one-third, indeed, nearly one-half of her life, the duration of the several attacks of ophthalmia having varied from four to six months; that medical treatment had been of little avail from the first commencement of the child's affliction up to the period of the prussic acid treatment having been adopted, and in this seizure sixteen or eighteen weeks were said to have already transpired; so that, *primâ facie*, it might appear that the termination of the disease was referrible rather to the period at which my services chanced to be called into requisition than to the particular treatment employed.

I am fully sensible of the efforts which are continually being made by Nature to throw off disease; yet when, in this case, I call to mind, that the beneficial agency of the prussic acid was manifested within an hour after its first application, — that the patient has ever since (*i. e.*, for nine years) enjoyed immunity from her troublesome disease —and that the case is not a solitary example of the propriety and excellence of the treatment of strumous ophthalmia by the topical application of prussic acid,—I must, in fairness, assume that the acid exerted a decided and unequivocally salutary influence.

PHLYCTENULAR OPHTHALMIA. — GASTRO-INTESTINAL IRRITATION. — CURED IN THREE WEEKS. — DILUTE PRUSSIC ACID AS AN EYE-DROP.

Case 7.—M. A. S., a little girl, 7 years of age, residing in a court in Ellis-street, was brought to me on the 28th Feb., 1842, at the suggestion of the mother of E. L.

The children had been in the habit of accompanying one another to a public institution.

Her countenance is pale and puffy-looking; the skin of the body is peculiarly soft and delicate to the touch; the irides are grey; the eyelashes coarse, and stunted at their points. The hair of the head is light coloured. The right eye is spasmodically closed, the lids have consequently a turgid appearance; the palpebral conjunctivæ are red. The marks of four leech-bites are apparent upon the lower eyelid. The stimulus of light is too painful to admit of the state of the cornea being satisfactorily ascertained. The left eye is not diseased. The abdomen is tumid and hot, and its superficial veins more marked than natural. She is restless at night, but no worms have ever been seen; the bowels are habitually costive; the tongue is covered by a thin creamy fur. She frequently vomits green frothy bile; the appetite is fickle.

History.—The mother states that her child has been more or less afflicted with disease of the eyes since the commencement of teething; she could not remember how many attacks she had had, but that their average duration was about six months. For the last six weeks she has been in attendance at a public charity. Upon her first admission there was a profuse yellow discharge from the eye, which was soon subdued by a lotion prescribed for it. As, however, redness of the eyelids and intolerance of light continued, leeches, blisters, aperients, and caustic drops, were subsequently employed, but without relief.

Treatment.—The following treatment suggested itself as likely to do good. S. pulv. ipecac. gr. x., statim ex theæ tepidæ cyatho.

℞ Hyd. c. cretâ, gr. ii., pulv. rhei gr. iii., pulv. ipecac. comp. gr. iii. Fiat pulvis omni nocte sumendus; mitte doses tres.

The eye to be frequently fomented with a warm poppy decoction. Two or three drops of the Pharmacopœial dilute prussic acid to be applied to the affected organ every night and morning. To subsist upon light nutritious food, and take plenty of out-door exercise.

March 4.—The fourth day of treatment. The mother reports that the child is better; the appetite is improved, and her sleep has become sound. The application of the drops produces pain, upon the subsidence of which the photophobia is relieved. To continue the powders, taking one every alternate night, the eye to be bathed with a tepid saturnine wash.

11th.—The eleventh day of treatment. The child presented herself to-day, which is cloudy, with her eyes open. There are one or two small albugos, probably resulting from phlyctens which have ulcerated, upon the right cornea. The tumid appearance of the eyelids is gone, showing that the spasm of their orbicular muscle has subsided. The conjunctiva continues of a red colour. The mother says, that

now her child runs about in the open air, but that prior to the late treatment her habit was to lie during the whole day with the face buried in a pillow. The tongue is clean, the papillæ of its apex red and elevated, the bowels regular, appetite good, sleep natural. Three drachms of castor oil to be taken at bedtime, and the stools therefrom to be examined. Pergat.

21st.—The third week of treatment. My little patient is to-day looking comparatively healthy. The corneal specks are nearly absorbed. Photophobia subsided. All the functions are reported as being healthy. The alvine discharges contain shreds of mucus.

℞ Vini aloes ʒiss., tinct. ferri sesq. ʒss. M. ft. guttæ; cujus capiat guttæ xx. ter in dies ex aquæ ʒss.

Remarks.—This child entirely recovered without any further treatment. The symptoms of depraved digestion were much more remarkable in this case than in that of E. L., as evidenced by the vomiting, variableness of appetite, tendency to constipation, and heat of the abdominal surface. The nature of the ophthalmic affection prior to my seeing the case, appears from the narrative of the mother to have been in the first instance catarrhal ophthalmia, merging, in consequence of the disordered condition of the primæ viæ, into the purulent form, which, when subdued by treatment, left the eye red and irritable. For the correction of these, four leeches, blisters, caustic drops, and purging-powders had been employed. This treatment failed, while a much more simple and soothing class of remedies, directed to the correction of the gastro-intestinal irritation and morbid sensibility of the affected eye, worked almost a charm in the course of three weeks, thus abbreviating the disease nearly two-thirds of what had been, on former occasions, its average duration.

Inflammation of the eye, of whatever kind, occurring in a person of strumous diathesis, is very prone to terminate in, or be complicated with, phlyctenular disease.

This patient continued free from ophthalmic disease up to February of the present year (1852) when she became my patient at the Eye Infirmary for acute catarrhal conjunctivitis of both eyes. She is now under treatment. Although the girl is healthy-looking, the disease is modified by the strumous diathesis; it dodges about from one eye to the other, and is attended by photophobia.

STRUMOUS OPHTHALMIA OF FOUR MONTHS' DURATION CURED IN SIXTEEN DAYS.

Case 8.—M. A. V., two years and a half of age, residing in Fordrough-street, was brought to me on the 14th day of March, 1842, presenting the following appearances and symptoms. The eyelids of both eyes are spasmodically closed; the inferior sinus of each palpebral conjunctiva is traversed by dilated vessels of a purple colour; the eyes are too intolerant of light to permit of the state of the cornea being decisively ascertained. The eyelashes are long and taper; alæ nasi broad; the lips tumid; gums free from irritation.

An eruption, crusta lactea, covers the chin, and extends to the commissure of the lips; the skin on the surface of the body is soft and delicate to the touch. The bowels are so irritable as to constantly disturb the child by straining. Her mother says that she sleeps with her face buried in a pillow, and that she rises at seven in the morning, but does not open her eyes until nine or ten o'clock in the day. The present ophthalmic affection is referred to an attack of scarlet fever, from which the child suffered four or five months ago. She has been under treatment for the last five or six weeks, at a public institution, and, in the opinion of the mother, has been but little benefited. I recommended very similar treatment, with the exception of the emetic, to that which was ordered in the last case.

At the expiration of sixteen days from its commencement, the facial eruption and ophthalmia were cured, and the muscular system had gained some tone. The child had been taken into the country for an hour or two every day, at all other times she had breathed the impure atmosphere of her home.

Remarks.—When strumous ophthalmia is complicated, as it often is, by a cutaneous disease upon the face or body, the constitutional treatment exhibited for the cure of the former in many cases first manifests its beneficial action by the subsidence of the eruption. If the scalp be implicated, the ophthalmic affection takes precedence in the process of cure.

The little girl whose case I have just related remained exempt from disease of the eyes for the following six years. In 1848 she consulted me as an eye-infirmary patient for acute corneitis of the left eye, with abscess in the substance of the cornea. She recovered with perfect vision; the iris did not prolapse; the leucoma resulting from the disease was fortunately near to the outer border of the membrane in which it was situated. I did not let out the matter by puncture, as recommended by Dr. Jacob.

[To be continued.]

SCIENTIFIC LECTURES.

HUNTERIAN LECTURES ON THE ANATOMY OF INVERTEBRATE ANIMALS.

BY RICHARD OWEN, F.R.S.,
Hunterian Professor to the College.

This Evening, May 1.—Lecture XXI.—*Mollusca Acephala.* Characters of the Tunicata, Brachiopoda and Lamellibranchiata; their organisation respectively exemplified by that of the Ascidian, the Terebratula and the Oyster. Structure and relations of the bivalve shell. Muscular system. Nervous system and organs of sense. Stomach and trituratiog style. Vascular and respiratory systems. Inhalant and exhalant syphons. Modifications of these and of the shell-valves in the Ship-borer (Teredo). Relations of the compound Ascidians to Polypes, and their propagation by gemmation as well as ova. Generative organs of dicœcious Ascidiæ. Development and metamorphosis of Ascidians. "Alternate generation" of viviparous Salpæ. Dicœcious condition the rule in lamellibranchiate bivalves. Male and female organs bulky but simple: short sperm-duct of males, short oviduct of females: no glandular appendages, and no intromittent organ. Modifications of gills to form marsupial pouches. Development of germ: rotation of ciliated embryo. Metamorphosis of "Glochidium" and other larval forms of bivalves: final purpose of the deciduous byssus.

Tuesday, May 4.—Lecture XXII.—*Mollusca Encephala.*—Characters of the Pteropoda and Gasteropoda. Muscular wing-like lobes of Clio: its digestive, glandular, circulating and respiratory organs. Structure and parts of the shell in Gasteropods. The foot and retractor muscle. Examples of the nervous system. Organs of vision and hearing. Modifications of the jaws and proboscis, of the stomach and intestine. Salivary, pancreatic, and biliary glands. Circulating and respiratory systems. Generative organs of the androgynous Gasteropoda. Combination of testes and ovarium: distinct sperm-duct and oviduct. Glandular appendages of the sperm-duct: intromittent organ. Albuminiparous glands of oviduct: multifid vesicles and spermatheca. Different relative positions of male and female external orifices. Dicœcious Gasteropoda. Development of the ova. Various and singular forms of the ovicapsules. Development of the embryo: phænomena of rotation in ovo. Deciduous nautiloid shells of the embryo nudibranchiata. The "Cirropteron" and other pteropodal larval forms of marine Gasteropoda.

Thursday, May 6, and Saturday, May 8.—Lectures XXIII. and XXIV. —*Cephalopoda.*—Characters of the class and of the two orders Tetrabranchiata and Dibranchiata. Modifications of the shell: its progressive simplification and diminution in the naked Cephalopods. Exceptional character of that of the Argonaut. Nervous system and organs of sense. Calcareous and horny jaws: tongue, ingluvies, gizzard, laminated cæcum and intestine. Sallvary, pancreatic, and biliary glands. Modifications of the circulating and respiratory systems in the two Orders. The ink-bag peculiar to the Dibranchiata. Both Orders dicœcious and oviparous. Parasitic Hectocotylus the probable male of the Argonaut. The single testis; glandular appendages of sperm-ducts. Spermatophora. The single ovarium: oviduct single in some species; double in others: ovidncal and nidamental glands. Female organs of Nautilus. Development of ovum and diverse forms of nidamental capsules; their analogy to the spermatophora in the male. Development of germ; radiated fission of germ-mass. Development of embryo: early manifestation of class-characters; rotation of embryo in the ova of Loligo. External and internal vitellicle. Cephalic umbilicus. Condition and powers of the young Cephalopod when excluded. Concluding remarks on the Invertebrata.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening,	May 1.	Royal Institution. *Annual Meeting of the Members.*
——	——	Medical Society of London. *Subject:*—Dr. Webster, F.R.S., "On the Health of London." Eight o'Clock.
Monday,	May 3.	Royal Institution. *Subject:*—C. B. Mansfield, Esq., "On the Chemistry of the Metals." Four o'Clock
——	——	Chemical Society. Eight o'Clock.
——	——	Epidemiological Society. Half-past Eight o'Clock.
Tuesday,	May 4.	Royal Institution. *Subject:* — E. Lankester, M.D., "On the Physiology of Plants." Three o'Clock.
——	——	Pathological Society of London. Eight o'Clock.
Wednesday,	May 5.	Royal Institution. *Subject:*—J. Conolly, M.D., "On Insanity." Four o'Clock.
——	——	Geological Society. *Subject:*—Sir C. Lyell, F.G.S., "On the Tertiaries of Belgium." Half-past Eight o'Clock.

Thursday,	May	6.—Royal Institution. *Subject:* — R. Westmacott, Esq., R.A., "On the History and Practice of Sculpture." Three o'Clock.
——	——	Harveian Society. Eight o'Clock.
Friday,	May	7.—Royal Institution. *Subject:* — Prof. E. Forbes, "On the Supposed Analogy between the Life of an Individual and the duration of a Species." Half-past Eight o'Clock.
——	——	Western Medical and Surgical Society of London. *Meeting of Council.* Seven o'Clock. *Subjects for Ordinary Meeting:*— 1. Mr. Keen, "On a Case of General Subcutaneous Cancer." 2. Dr. Traquair, "A Comparative View of the Various Methods at present employed in the Treatment of Rheumatic Fever." Eight o'Clock.
Saturday,	May	8.—Royal Institution. *Subject:*—Prof. Faraday, "On Points Connected with the Non-Metallic Elements." Three o'Clock.
——	——	Medical Society of London. *Subject:*—J. T. Brown, Esq., "On the Treatment of Ovarian Dropsy by a New Method of Operation." Eight o'Clock.

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Medical Times & Gazette.

SATURDAY, MAY 1.

THE COLLEGE OF PHYSICIANS.

We gave last week an abstract of the proposed new Charter of the College of Physicians. The following are its chief features:—

The sphere of the College is to extend through England and Wales; all physicians will be compelled to join it, by means not specified in the Charter, though reference is made to them; the class of extra-licentiates will be absorbed into the new class of members; all present practising physicians (not being fellows or licentiates) will be admitted to the membership; future physicians must undergo examination; members will become fellows by examination or election.

Of the utility of these alterations there can be no question. The present Charter is both liberal and fair; it aims at a more perfect organization, and we are bound to say, that it appears to attain it. After a very careful examination of the several clauses, we see nothing to object to in the filling up of the details, except in one or two cases. We should wish to see the method of election of the several officers a little more democratic. The general body of Fellows appear to have, except in the case of the Council, no power of initiation. They propose the Council apparently, but then deliver themselves hand and foot to their nominees. The Council propose the President and the Censors; the President nominates the Vice-Presidents. In most societies and corporations, every member of the electing body has power to propose a candidate for any office, and this method has great advantages.

Another point to which we make some objection is, the utter exclusion of the members from all share in the government. Why, indeed, is it necessary to keep up this distinction of fellows and members? Or, admitting that the latter is a good probation, before a young physician is admitted to the higher honours of the fellowship, could no means be found of connecting, in some way, the members more closely with the College?

Again, supposing the fellows to be created on account of their high acquirements, why not allow to each a vote? Why limit the privilege of voting to those resident in London or its vicinity? for it is evident, that to compel personal attendance when a vote is to be given, is really to exclude the great bulk of the provincial Fellows from taking part in the management of the affairs of the College. Still, even with these drawbacks, the new Charter will be a great gain, a manifest benefit to all physicians. Time, too, will cure most of, if not all, these faults. The door is to be opened widely, and it is strange if the College be not after a little while thoroughly ventilated.

There is, however, one clause which we are sorry to see the College have inserted. We cannot see why the College should have the power of granting the degree of M.D. to any candidate who has reached forty years. Why not equally give the College the power to grant degrees at any age? Why not, in fact, make of the licensing College a graduating University? What is there in the age of forty so magical, that all usual rules must give way to it? "At forty, a man is either a fool or a physician" is the old saying, and the College seem disposed to seriously carry out the proverb. We cannot doubt but that the Universities will oppose this attempt to make the College of Physicians a refuge for senile would-be graduates.

The only argument which presents itself to our minds in favour of this clause is, that a general practitioner, on reaching the age of forty, might easily, if he wished, pass into the higher grade of the Profession. But there is even now no real difficulty in doing this; and, in fact, a great number of general practitioners are from the first graduates of one or other University. This trifling advantage would not compensate for the disadvantage of having another body authorised to grant degrees, added to the too numerous ones already in existence.

Putting this aside, we have no hesitation in expressing our hope, that the College may obtain their Charter. We trust, when they have got it, they will take care to let in no homœopathists, and then they will really do the physicians throughout the country a great service, by drawing a line which the public will be able to appreciate, between legitimate and irregular practitioners.

NEW CHARTER OF THE COLLEGE OF SURGEONS.

In December last we laid before our readers in full the Draft Supplemental Charter of the College of Surgeons. The College has now received a new Charter, identical with that Draft. The following are its chief points:—

The Council may elect, as a Fellow, without examination, now or hereafter, any member of the College of fifteen years' standing who was a member of the College before 1843, *i. e.*, before the date of the last Charter, provided "that he does not sell or supply drugs or medicines otherwise than in the due exercise or practice of his profession as an apothecary," that he produce a certificate to that effect

signed by six Fellows of the College, by two Fellows and the superintendent medical officer of the military department, or by two Fellows and the Governor of any of the Colonies; and that he pay ten guineas to the College. The Council may also admit, without examination, to the Fellowship, yearly, on the payment of the same sum, any two members of the College of twenty years' standing, as well as the Fellows, members, and licentiates of any other College of Surgeons in the United Kingdom.

The members of Council are to be elected from the Fellows of twenty years' standing, not at the date of their election practising as apothecaries. Candidates for a seat in the Council are to transmit their own names to the Secretary of the College, with a "nomination, signed by six Fellows;" the Council are then to announce by advertisement the names of the candidates, and from these the Fellows are to select at a meeting summoned for that purpose. Three members of Council retire annually, but are eligible for re-election. The ordinary examiners are to be appointed for five years by the Council, who are further empowered to appoint "not less than three persons" to the examiners in midwifery.

This Charter has been, as we anticipated, received on the whole with satisfaction by the Profession, and, it must be confessed, is a great improvement on the last. Although not all we could wish, yet it confers a great benefit on the Profession. The cause of medical reform is advancing—slowly, it may be, but none the less surely. The monster injustice of the Charter of 1843 must now be repaired. The members of the College fairly entitled to the Fellowship are to receive it; surgeons are to be in examined midwifery; provincial surgeons may, henceforth, enter the Council; and the mode of electing the members of Council would, if there were no country Fellows, be unexceptionable. We have sought earnestly for an explanation of the exclusion of the country Fellows from the exercise of their privilege of voting at the election of the Council, but we have sought in vain, unless it be that the existing Council are desirous of retaining more than their legitimate influence in the choice of their successors and colleagues. Ultimately, the Council will have to yield this point.

To repeat our own words, we receive the Charter, then, as an instalment towards the settlement of the question of medical reform, and, as such, we accept it with gratitude, determined, at the same time, to demand the rest, until the full debt be duly discharged.

THE PHARMACY BILL.

This week has been an important one in the history of the new Pharmacy Bill. The Scottish Corporations, who, up to this time, have shown an extraordinary apathy in regard to a measure deeply affecting their interests, have at length been roused, and are now taking vigorous steps in regard to their existing rights.

On Monday and Tuesday, the Select Committee took the evidence of Fellows of the Royal Colleges of Physicians and Surgeons of Edinburgh, and of the Faculty of Physicians and Surgeons of Glasgow. The general tenor of that evidence may be inferred from a document now before us.

The College think it might be for the public good that druggists should be examined, registered, and distinguished by an honorary title; at the same time, they object to the institution of a new Corporation, which shall enjoy exclusive privileges in any department, and the establishment of which would still further comprehend the general question of medical reform. They suggest further, that it would be a retrograde movement to confer a monopoly on any body whatever; that they have themselves ceased to exercise their powers over druggists, because they found public competition a better check than any they could devise; that they cannot give their sanction to the formation of a Board in London, to which the nomination of the parties who are to carry out the objects of the Bill in Scotland are to be intrusted; that they "observe with regret that it is proposed to enforce the provisions of this Bill by inflicting penalties for breaches of its enactments;" "and are of opinion that no penalty should be inflicted except in the case of parties fraudulently assuming a title to which they have no legal claim;" that they decidedly object to the privilege of being registered as Pharmaceutical chemists being withheld from members of the Medical Profession; and suggest that the following words should be added to Clause XX., viz., "and that all persons who may now be, or may hereafter become, entitled to practise, under the licence of any of the corporate bodies in Scotland examining on materia medica and pharmacy, shall be entitled to carry on the business of pharmaceutical chemists;" and, finally, they object very decidedly to the arrangement proposed by Clause III., permitting of voting by proxy at the meetings of the Society.

It will be seen that the views of the Royal College of Physicians of Edinburgh agree in the main with those we expressed in our Article of March 6th, on "The New Pharmacy Bill;" and their efforts to oppose it will be fully appreciated by the great body of the Profession.

Drs. Rinton and Alexander Wood, from the College of Physicians; and Drs. Combe and Gairdner, from the College of Surgeons of Edinburgh; and Dr. Watson, from the Faculty of Glasgow, had an interview with the Home Secretary on Tuesday on the same subject.

It is a satisfaction that, in one part of the kingdom at least, the Royal Colleges see the injurious bearing of Mr. Bell's Bill on themselves and on the Profession.

HILL-TOP *VERSUS* VALLEY-BOTTOM WATER.

We have received an important Memorandum, just issued by the Sanitary Association on the Metropolitan Water question. This document refers to a vast mass of chemical and engineering evidence, in proof of the superior quality, ample quantity, and moderate cost, of the water obtainable from the barren uplands of Surrey, as compared with that which the monopolist water companies pump up from the sewage-tainted Thames. It shows that *hill-top* water is invariably purer and softer than *valley-bottom* water; the former being the pure sun-distilled rain-water, taken as near as possible to its source in the clouds; while the latter is the same water, taken after it has washed the surface of manured fields, and of cattle-dunged roads and streets, besides receiving the drainage of the valley-population, which numbers, in the case of the Thames, (even above Teddington Lock,) more than three quarters of a million. We have no hesitation in confirming the third paragraph of this very able and luminous paper; which sets forth the insalubrity of such tainted river water, especially in hot epidemic weather, when the activity of fermenting matter becomes so intense, that water not visibly impure, or even clouded, may yet cause violent diarrhœa, dysentery, etc. For these reasons, we hold the river Thames, even when in its clearest and purest condition, a far less safe and suitable water source for the Metropolis, than the pure sand-springs of the Surrey hills; and we know we shall be borne out by the whole Medical Profession, in

demurring to the statements of the chemical witnesses who were last week examined before the Water Committee, and who pronounced the organic contamination of the Thames too small in *quantity* to affect health. Those gentlemen are, doubtless, very accomplished analytical *chemists*, but they betray an entire ignorance of the physiological and pathological bearings of the water question; which can only be elucidated with due authority by well-informed and experienced medical men. It argues, indeed, no slight neglect on the part of the Commons' Water Committee, that it has called so little authoritative professional evidence to prove the superior salubrity of soft over hard water, and of pure over sewage-tainted water, for potable and culinary use. Dr. Prout, it is well known, recommended the use of distilled water to dyspeptic patients; Dr. Leach, of Glasgow, bears witness to the marked decrease of dyspeptic and urinary disorders in that town since a softer and purer water has been introduced; and Mr. Simon, of St. Thomas's Hospital, who unites the highest professional attainments with great sanitary experience as officer of health to the City, not only confirms these views in a recent Report, but says truly, that they are the general opinions of the Medical Profession. To those opinions we shall endeavour to give effect, by supporting the proposed introduction of the pure soft water from the Surrey sands, and by opposing the threatened perpetuation of the monopolist companies, determined as they appear, in the teeth of all evidence, to pump up the hard and foul Thames water, and sell it to the population at four times the proper price. Between *hill-top* water, pure and cheap, and *valley-bottom* water, costly and foul, our choice is made; and we shall lose no opportunity of demanding, on behalf of the Profession and the public, the abandonment of the condemned Thames river supplies, in favour of the sparkling sand-spring water from the Surrey hills.

UNPAID MEDICAL OFFICERS.

In another part of our present Number will be found a letter addressed by the Assistant-Physicians and Assistant-Surgeons of the London Hospital to the Governors of that Institution. It is an ably-written document, and contains in plain but forcible language a statement of the injustice of employing assistant medical officers without remunerating them in some measure for their labours. It cannot fail to command attention; and we believe that it will as certainly lead to the object its authors have in view. For years the junior officers of the majority of our metropolitan hospitals toil on without deriving, directly or indirectly, the slightest compensation for their services. Many of them even grow grey ere they attain the posts to which they aspire; while the senior medical officers, as the writers of this letter state, necessarily absorb all the practice arising from hospital connexions, and receive the fees paid by the pupils. The members of no other profession are guilty of the folly of working the best part of their life without fee or reward; and we trust the days are numbered in which medical men will commit so gross a blunder.

Dreadnought Hospital-ship.—The anniversary dinner of the Seamen's Hospital took place on Monday last, on which occasion it was stated, that upwards of 65,587 patients, of whom nearly one-half were foreigners, had been relieved since its establishment; and that, during the past year, 2242 had been admitted. Mr. Hume, the Chairman, appealed so successfully to the meeting, that 1350*l.* was subscribed after dinner.

Sir William Burnett, M.D., F.R.S., K.C.B., Director-General of the Medical Department of the Navy, is on a visit of inspection to the medical establishments attached to Portsmouth.

REVIEWS.

The Past and Present State of Intramural Burying-places; with Practical Suggestions for the Establishment of National Extramural Cemeteries. By G. A. Walker, Surgeon, etc. Pp. 50. Longmans and Highley.

A bold and uncompromising exposure of the great evils to which men "in populous cities pent" are exposed by the grave-yard nuisance. Mr. Walker's name is as closely identified with the cure of this evil as that of Howard with the improvement of prisons, or of Conolly with the treatment of the insane. He has rendered a great and lasting service to his fellow-countrymen; and this pamphlet, which not only points out the evil, but shows the remedy, we cordially recommend to the perusal of our readers.

The Hand; its Mechanism and Vital Endowments, as evincing Design. By Sir Charles Bell. Fifth Edition, with Woodcuts. 8vo. Pp. 128. London: J. Murray. 1852.

This book, we need not say, is one of the Bridgewater Treatises, and one of the most interesting and admirably written of the series. The fourth edition was published in 1837; the present is edited by Mr. Alexander Shaw, who has enriched it with notes furnished by its author to Lord Brougham's edition of "Paley's Natural Theology," and extracts from "Animal Mechanics." These additions occupy about eighty pages. Mr. Shaw has performed his task with great judgment. The work is beautifully "got up,"—paper, type, and woodcuts unexceptionable.

The Philosophy of Living. By Herbert Mayo, M.D., formerly Senior Surgeon to the Middlesex Hospital, etc. etc. Third Edition. Pp. 282. London: J. W. Parker. 1851.

"The Philosophy of Living" was written, says its author, at the suggestion of an eminent publisher, who desired to have a book to the title. It is addressed to that portion of the public whose circumstances allow them to live where and how they choose. "It is," Dr. Mayo writes, "to be viewed rather as ancillary to the advice of the fashionable physician, than as conveying lessons of sanitary regulation and provision for the poorer classes." Dr. Mayo's style is excellent, and his philosophy sound.

The Vegetation of Europe; its Conditions and Causes. By Arthur Henfrey, F.L.S., etc. etc. Pp. 387. John Van Voorst. 1852.

This work is one of a series—"Outlines of the Natural History of Europe"—in course of publication by Mr. Van Voorst. It is only during the last half century that botanical geography has been studied as a special subject. At first it was supposed that a difference in the temperature of different countries was sufficient to explain the differences observed in their vegetation, but more careful observation showed this to be an error. A variety of atmospheric states, and the chemical and physical conditions of the soil must be considered, in order to explain apparently anomalous facts. But these are insufficient; and Mr. Henfrey says—

"Countries have become populated with plants partly by the spreading of some special kinds from centres within those countries where they were originally exclusively created, and, while these have spread outwards into the neighbouring regions, colonists have invaded and become intermingled with the indigenous inhabitants."

He then proceeds to consider the general influences on the distribution of vegetation, and special influences on the distribution of vegetation, and, subsequently, the characteristics of the vegetation of the countries of Europe.

This work will be found a very valuable acquisition to those interested in the subject on which it treats.

A Treatise on the Diseases of the Chest; being a Course of Lectures delivered at the New York Hospital. By John A. Swett, M.D., Physician to the New York Hospital; member of the New York Pathological Society. 8vo. Pp. 585. New York: Appleton and Co. 1852.

This work consists of twenty-two lectures on Diseases of the Lungs, and thirteen on Diseases of the Heart. They

were delivered ten years ago, and published at that time in a New York weekly journal. Since then, Dr. Swett says, he has carefully revised the whole subject, and added the experience of ten years' hospital and private practice. These lectures prove Dr. Swett to be a good practical physician; one who has seen much, and paid considerable attention to his cases; but we cannot recommend them very strongly to the notice of the Profession in this country. They are decidedly inferior to the standard works on the same subject we already possess. In proof of this assertion, we shall point out some of the defects in the first lecture, which is headed thus:—"Physical Signs of Pulmonary Disease." There is here no mention of friction-sound, or of friction fremitus, and, strange to say, neither is referred to when describing the physical signs of pleurisy. Jerking respiration is said to be always due to the deposit of tubercles in the lungs; vocal fremitus is scarcely mentioned; the difference of its force on the two sides is unnoticed; and in the chapter on Pleurisy vocal fremitus is not even referred to. Cavernous breathing, as distinct from amphoric, is affirmed to indicate unequivocally the presence of a cavity; and œgophony is spoken of as a common sign. These are a few of the faults of omission and commission in the first lecture; many of those in the subsequent lectures are yet more important.

UNPAID MEDICAL OFFICERS.

TO THE PRESIDENT, VICE-PRESIDENTS, AND GOVERNORS OF THE LONDON HOSPITAL.

My Lords, Ladies, and Gentlemen,—We, your assistant medical officers, have long been impressed with the propriety of our professional services rendered to your Institution meeting with some adequate recognition. Our opinion has of late been so fully borne out by the powerful advocacy of the Medical Press, and by the conduct of the Governors of several medical institutions, that were we any longer to remain silent on the subject, we should appear as a consenting party to what we regard as a manifest injustice.

Many of those we address are unaware that our responsible and onerous duties are performed without any remuneration. These duties require attendance at the hospital at definite periods during every week, and the acting in place of our senior colleagues, as occasion may require. They involve much time taken from the most valuable part of the day, considerable mental anxiety, and bodily fatigue. As evidence of such being the case, we may mention, that the average annual number of patients under the treatment of your assistant-staff has, during the last ten years, amounted to 15,431—the largest number being, in 1849, 20,614.

We feel that the gratuitous performance of these laborious duties has grown up under peculiar circumstances, and is at variance with the spirit and intention with which your important charitable Institution was originally founded.

In the early days of the London and other metropolitan hospitals, the remuneration of the physicians and surgeons was provided for directly by the fees paid by pupils, and indirectly by private practice, which such a position soon established. In the course of time, however, the medical requirements of the several hospitals having much increased, assistant officers were appointed, and it must have been thought at the time that the remote prospect of promotion to seniority would be ample compensation.

A full and fair discussion of the case, which the limits of a letter scarcely permit, would, we are confident, fully demonstrate the fallacy of such a conclusion. In the capacity of Governors, you very properly require that your assistant medical and surgical officers should hold a high professional rank, (to obtain which requires a prolonged and very expensive preliminary education,) and practise as consulting physicians and surgeons, the least remunerative career by far during early life, the senior medical officers almost necessarily absorbing the practice arising from hospital connexions. Hence it follows, that your assistant officers who are called on to sustain their professional and social position, perform during the best years of their life the important duties of your hospital without any adequate acknowledgment. Should their health give way, or other unforeseen circumstances arise, as has more than once occurred, you as Governors can scarcely call to mind without regret, that many years of anxious toil have been expended by the members of your assistant-staff in the service of your Institution, without that fair remuneration which not only generosity would suggest, but even justice may claim.

Some such considerations as the above have within the last few years induced the Governors of several hospitals, viz., of Guy's, St. Thomas's, St. Bartholomew's, and the Royal Free Hospital, to give an annual stipend to their assistant medical officers. It may be further stated, that the Governors of St. Luke's, Bethlehem, and the Dreadnought Hospital, and those of no less than ten metropolitan dispensaries, do the same.

We cannot but think that the Governors of the London Hospital will feel the force of these statements, and that, emulating as they do the other hospitals of the Metropolis in their edifice, their method, their arrangements, the number of their patients, and the magnitude of the benefits conferred on suffering humanity, they will not be less anxious than the Governors of similar establishments to do justice to those through whom the most important of these results are in a great measure obtained.

It has been suggested, that the insufficiency of the resources of your hospital to meet the heavy demands on its funds may be offered as a plea for your not remunerating your medical officers; but the liberal manner in which the services of all your other officers are acknowledged forbids the belief in the validity of such an objection.

After much consideration, we have thought it proper to appeal to the general body of Governors, rather than to your Committee, because, having been elected by you, we feel that it is only through you that this act of justice can be done.

Supported by arguments, by the Press, by precedent, by the opinion of our senior colleagues, and a confidence in your sense of right, we have felt the propriety of bringing the subject thus before your notice, and of claiming for it your full consideration.

We have the honour to be, my Lords, Ladies, and Gentlemen, your faithful and obedient servants,

Patrick Fraser, M.D.
Herbert Davies, M.D.
Nicholas Parker, M.D.
George Critchett, F.R.C.S.
Nathaniel Ward, F.R.C.S.
John Cawood Wordsworth.

GENERAL CORRESPONDENCE.

THE CASE OF MR. PASCOE.

I.

[To the Editor of the Medical Times and Gazette.]

Sir,—I pursue the subject of my evidence in Mr. Pascoe's case, after reading in your Number of the 24th instant your observations upon my first letter and five other communications condemnatory of my opinions; and before I again enter upon the question, as a medical one, upon the admissibility of savine as a therapeutic means, let me observe, that one of our two county papers, the *Cornwall Gazette*, which is conducted and edited by two medical men of reputation in the county, declines to enlist itself in opposition to Mr. Pascoe's sentence, upon the expressed conviction, that proof had been adduced to warrant the verdict.

I pass by your two correspondents, who have had the taste to conceal their names, merely noticing of "Subscriber and M.R.C.S.," that he appears to be the only one of the five who has been a prescriber of savine, while I cannot find from the three gentlemen who have entered upon this subject, that they know by their own practice and experience more than myself upon the action of this substance.

I am ready to entertain Mr. Lowe's courteous letter, and to comply with his invitation to reason upon points.

He assumes that I had stated in evidence, that the savine had produced abortion. So far from that, it was distinctly seen that this drug had produced no such effect; and Mr. Lowe must be acquainted with the fact, that it is not necessary, in order to complete the offence with which the prisoner was charged, that the drug administered should have the intended effect.

I stated, that if abortion did not follow within fourteen days from the irritating effects of savine, it (the abortion) could not be ascribed to savine, and, further, that the dose prescribed by Pascoe was, in my opinion, calculated to produce purging, etc., but no consequences to the woman of a dangerous kind or degree.

And now let us take the point of the possible, or even probable, effects of fourteen drops of oil of savine taken daily for the space of a month. I admit that the authority of Ashwell, given by Mr. Lowe, upon the dose of the oil, is against me; yet it should not be overlooked, that he states its use to be much restricted at present; but when I find him giving the authority of Brande, who says, "it should be always administered with the greatest caution,

lest it induce inflammation," I cannot see that this authority favours his views.

If Hooper was successful with the powder of savine, in doses of a scruple, or at most a drachm, he succeeded with a form of the drug known, or said by Dr. Paris, to be rendered comparatively inert, by the drying process dissipating its active principle, the essential oil.

But supposing a drachm of the powder to retain all the active qualities of savine, Hooper, or any other person, in prescribing this, his maximum dose, twice a-day, had, according to the authority before used by me, ordered not quite the strength of two drops of the oil, if Dr. Royle's statement of the proportion of oil obtained by distillation indicates anything like the real proportional composition of savine. In justice to Mr. Lowe, I grant that Pereira's testimony is favourable to his statement; but in justice to myself, too, let me add, that Pereira's formula for the infusion, found in Royle's Materia Medica, had influenced my judgment. Mr. Lowe, who does not declare that he has used savine, will pardon me when I affirm, that from my reading of the substance, I was as well acquainted with the fact as he was, that when miscarriage is the effect of savine, it can only be at the risk of the woman.

I do not learn anything from the authority of Dr. A. T. Thomson, when I find him instructing us, that "at all times the internal use of savine requires caution;" and when I return to Dr. Paris, who says, that Cullen's opinions had brought it into disrepute, although he (Dr. Paris) had found it useful in amenorrhœa in females of relaxed systems; and when, in addition to this, I find Dr. Forbes, in his review of Paris's last edition, upon the subject of ergot as an emmenagogue, stating, that, in his opinion, ergot is nearly as uncertain in its operation upon the menstrual secretion as other emmenagogues, but, as it is productive of no injury to the constitution, it may be adopted, I am not yet satisfied that Mr. Lowe, Mr. Irving, or Dr. Barker would, if ever they use savine, prescribe fourteen drops of the oil to be daily taken for a month, without watching their patients.

And, after all, I ask this question—Can they find Thomson, Pereira, Brande, Ashwell, or any other authority, suggesting that a respectable and discreet medical man would prescribe savine in any form or dose, without previously ascertaining that the patient was not pregnant?

It is not enough for me to find my opinions opposed, through your Journal, by five, or fifty, or five hundred medical men, like myself, of obscure or ordinary standing, after the positive, and possibly premature judgment uttered by yourself. Let this case, with all its points, be fairly put to the judgment and the decision of medical authority; and, after that, it will be either for me to show to the Profession, that I have sufficient moral courage to admit that my testimony has been given in error, or for you to retract, to some extent at least, your declaration, that William Hamlyn Pascoe has been convicted upon "medical evidence which is utterly worthless and untrue." I am, &c.

WILLIAM MOORMAN, jun., L.A.C., M.R.C.S.

St. Columb, Cornwall.

P.S. Since writing the above, I have received an anonymous letter, dated at Bristol, and signed "Humanitas," upon the subject of my evidence at the late trial of Mr. Pascoe, and calling upon me to communicate with the Secretary of State, and to admit that my evidence has been erroneous.

The writer accompanies this application with expressions somewhat invective, and with the declaration that he, ignorant of the existence of pregnancy, has in two instances known abortion to follow his administration of savine.

If this, coming from an anonymous writer, can be taken as a fact, it shows at least that savine is a drug which ought to be discountenanced. The writer, whoever he is, will see that I am by no means so tenacious of my opinions as to turn from reasoning; but I cannot comply with the sudden and offensive application of any man, who, from any cause, is afraid or ashamed to subscribe his name.—W. M.

II.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have read with exceeding care, the remarks which have appeared in your Journal with reference to the above important trial, and it is not without feelings of deep regret, similar to those which you yourself have expressed, that I think it right to follow in your footsteps, and to criticise freely the medical evidence of Mr. Moorman.

I shall dwell, in my observations, on the evidence of Mr. Moorman at the trial, and on his letter in your last Journal, at one and the same time.

The first thing, then, which strikes the reader, on looking at the particulars of the evidence, and at the letter, is the great want of knowledge on the subject of that evidence, which Mr. Moorman shows himself to have possessed at the time of giving it. Speaking of the therapeutical action of savine, he admits, "that he had never used the drug himself, nor did he know any other practitioner who had used it." Practically, therefore, it is evident that Mr. Moorman knew nothing whatever about savine. Again, in information from written authorities as to the action of savine, Mr. Moorman seems to have been miserably deficient. Twenty English writers at least, to say nothing of foreign, and of the ancient Greek ones, commencing with Hippocrates, have spoken on this subject, and expressed various opinions: and yet, as far as we are able to learn, he (Mr. Moorman) contented himself by consulting two authors only; thus making it obvious that his acknowledged want of practical information on the matter was in no way compensated for by his theoretical information.

That this criticism may not seem too severe, allow me, Sir, to bring forward two or three of Mr. Moorman's statements, and to try them, partly on their own testimony, and partly on the written opinions of the various writers who have spoken upon the properties of savine.

1st. Mr. Moorman asserts, "that, in his opinion, fourteen drops of oil of savine per day would produce the peculiar effects of savine, such as irritation, or purging, or inflammation probably of the small intestines, and that, as a consequence of this, miscarriage might result." He also states, "that no man of competent skill would, in his opinion, use it in such quantities, unless the object was abortion." Now, the impropriety of giving any such evidence as this, on the part of Mr. Moorman, at once becomes apparent, when the statements noted above are referred to. "Mr. Moorman has never given the drug savine, nor does he know any practitioner who has given it." He is ignorant, in fact, of its effects, either for good or for evil! What right, then, has he to affirm on oath, that the drug in question is capable of producing any such effects as those he names? Mr. Moorman can have no trustworthy knowledge concerning that of which he has neither heard nor seen; neither has he any more right to assume, that savine, in the doses named, might not be used with all safety for the legitimate purpose of causing the menstrual flow, than he has to assume, that in such doses, it could only be used for the illegitimate purpose of producing abortion. But, more than this, had Mr. Moorman inquired into the matter, he would have found, that no man of competent skill would employ savine, in any dose at all, for the purpose of producing abortion, since he would have discovered that which is the fact, viz., that savine, neither by direct nor indirect agency, possesses much power to produce abortion. He might have learned, by the merest glance at the works of those two illustrious British medical jurists, Dr. Alfred Taylor and Dr. Christison, that abortion from the effects of savine is the exception rather than the rule; that a pregnant woman has been known to take the oil of savine in doses of 100 drops daily without its effecting abortion; that all the other effects of savine, such as intestinal irritation and purging, may be produced during pregnancy, and yet no abortion result; nay, that a woman so situated may die from the effects of this drug, and remain undelivered!

2ndly. "Mr. Moorman affirms, that savine is discountenanced by the Profession now a days, and that no practitioner less skilled than himself would use it as an emmenagogue."

This assertion is at once so gratuitous and contrary to all fact, that one is astounded to know that it ever passed from the lips of a qualified medical man. Your correspondent, Mr. Lowe, has shown this in the list of authors given in his letter. To this list I would add the authority of Dr. Anthony Todd Thomson, who, in an article on Emmenagogue in the "Cyclopædia of Practical Medicine," thus remarks: "In whatever manner it acts, savine or its oil is well adapted for cases of amenorrhœa connected with a feeble state of the constitution, and a languid circulation." Beck, also, in his "Medical Jurisprudence," as "an effective emmenagogue." Nor did Cullen, to whom reference has been made, deny its action as an emmenagogue; he simply said, that, in consequence of its heating properties, he had not ventured to use it as such.

I may add, moreover, that although I have never used savine myself, yet I know gentlemen who do, and who have long used it, and who consider it an efficient remedy for bringing on the menstrual flow.

3rdly. Mr. Moorman gives an opinion, "that the dose of savine administered by Mr. Pascoe (14 drops daily) was very large, and that such large doses were not used in old practice."

These statements are as gratuitous as the last were. Thus, Dr. A. T. Thomson gives the dose of savine as, Powder, 5 to 10 grains; oil, 2 to 6 minims. Christison, powder, 10 to 15 grains; oil, 2 to 5 minims. So much for modern authority. On referring

to more ancient authors, I find Dr. Home, of Edinburgh, in his Clinical Reports, (written in 1783), to which allusion has been made by Pereira, saying of savine, "Authors mention a drachm" (of the powder) "as a proper dose. I gave generally but half that quantity, and have found it useful and safe." Then follow the reports of five cases of amennorrhœa in which savine was employed; in three with success. (Third Edit., p. 420.)

As a further proof, that the old practitioners did not consider savine a very powerful remedy, I will just refer to the article "Sabine," or "Savine," in Dr. Stephen Blancard's "Physical Dictionary," a book published in 1726, and which was a first authority in its day. The writer here, after describing the well known properties of savine, states in reference to its dose, thus:—"A spoonful of the juice of it mixed with milk, and sweetened with sugar, has been given with great success to children with worms, and it is an extraordinary medicine, and in no way dangerous."

There are still other matters, Sir, with reference to this medical evidence, which have an important bearing on the disagreeable position in which it, and the conviction it led to, place every practising member of our Profession; but my hand is checked from writing on this question, by the knowledge that I am already guilty of trespassing too far on your columns. It will be observed, that in what I have said above, no speculations have been entered into with reference to the moral guilt of Mr. Pascoe. I am convinced myself, that the trial of Mr. Pascoe proves nothing against him, and I sincerely hope that the members of the Profession will unite to memorialise the Secretary of State for a fresh inquiry on his behalf. It has been my object, however, only to deal with Mr. Moorman's statements, as forming the evidence of a scientific man, to show that his own admissions ought to have been sufficient to have shut him out of court, and that his assertions have no accuracy left in them when tried by the experience of others.

Mr. Moorman says that his evidence was not hastily delivered; so much the worse for him, in that it exhibited such grievous ignorance. He says it was conscientious; and that he believed what he said to be true, at the time of the trial, I quite admit. But surely it was not very conscientious of him to give sworn opinions on a subject which he admits himself to be unacquainted with, and to make blind statements directly contradictory to the opinions of others who have carefully studied the matter, and the benefit of whose labours he might have obtained by the merest possible exertion.

One word more. Mr. Moorman, in his letter, observes,—"that should his opinions be held erroneous, no one would more deeply regret than himself the effects of those opinions." Now, this admission (notwithstanding all my previous criticisms) I do greatly admire; it is very atoning; it is nobly spoken; and it does as much credit to Mr. Moorman's heart as his evidence does discredit to his professional knowledge, and to his abilities as a medico-legal witness. I am, &c.

Mortlake. BENJAMIN W. RICHARDSON.

III.

[To the Editor of the Medical Times and Gazette.]

SIR,—Fearing lest any of your numerous readers should imagine that the Medical Profession in this county take no interest in the unhappy fate of poor Pascoe, I beg to apprise you that I have the honour (for I consider it such) to have appeared first in public on his behalf. Herewith I send you a copy of a letter of mine, which I forwarded to the *West Briton* newspaper, the most widely circulated of our local papers. I am much gratified that the object I had in view has been so far answered that it has been the means of attracting a vast deal of attention to the subject, as I am convinced of from a number of letters I have received both from medical men in this neighbourhood, altogether unknown to me, and also from London, from gentlemen who are at the head of the Profession. I feel personally greatly indebted to you for the able leader given two weeks since in the *Medical Times and Gazette*, and that that very article "has been heard even in St. Columb." I shall feel obliged by the insertion of the before-mentioned letter of mine in your next Number. I have also sent you Mr. Moorman's reply to mine, which you can also insert; from which you will perceive, that his letter, given in your last Number, he intended as an answer to mine.

I think Mr. Moorman's letter, published in the *Medical Times and Gazette* of Saturday, calls for a few observations. And at the outset, I beg you to bear in mind Mr. Moorman's statements, given on oath, "that no medical man would give savine for any legitimate purpose." He now says, that his answers were given under the following considerations:—

I. His never having given it or known it given. I very much fear that this has led him into very serious errors. Does Mr. Moorman believe that he has given, or known others give, all the remedies used in medicine?

2. Dr. Royle's Manual; an authority which, according to Mr. Moorman's own showing, entirely condemns his statement. Speaking of savine, he says, "In small doses it is stimulant and emmenagogue." I quote from Mr. Moorman's own letter.

3. Dr. Paris's Pharmacologia, who states, "that Dr. Home, of Edinburgh, was in favour of savine as an emmenagogue, but that the adverse opinions of Cullen had brought it into disrepute." I again quote from Mr. Moorman's letter.

Mr. Moorman then adds, "These, then, were the authorities upon which I formed my opinions." What! Dr. Royle and Dr. Home, who speak of savine as an emmenagogue! Did they ever give it for "any legitimate purpose?" Is it possible? The very authorities quoted by Mr. Moorman knock the ground on which he endeavours to stand from under him.

I do not think Mr. Moorman has acted fairly in giving Dr. Cullen, who flourished so many years ago (he died February 5th, 1790), when he despises "Hooper's Dictionary," the last edition of which was published about three years since, and, according to Mr. Moorman, is "an old-fashioned book!"

In his letter, Mr. Moorman says, "If by the majority of the Profession (speaking of his opinions) they are held to be erroneous, no one could more deeply regret than myself (qy. Pascoe) the effects of these opinions, or more earnestly desire an application to the Secretary of State for a reconsideration of the prisoner's case;" and I now call on Mr. Moorman to send in a statement on Pascoe's behalf to the Home Office, in his own individual capacity, in deference to the opinions of Drs. Royle and Home, quoted by himself; as likewise to the opinions of Hooper, A. T. Thomson, Churchill, Locock, Beck, Christison, Pereira, Ashwell, Bovin, Brande, Ballard, Garrod, and Chapman.

As Mr. Moorman has made some remarks on the disposal of the child, I propose giving you a statement of the custom prevalent in this locality regarding the burial of still-born children. The sexton is sent for, or the child is carried to his house after dark by the nurse or some friend; so that nothing unusual occurred in the interment of this child, and Mr. Pascoe did not go out of the beaten track.

I am very sorry, for Mr. Moorman's sake, that he has alluded to the former trial of Pascoe for manslaughter, as it does somewhat savour of a strong animus. In that case, as well as my memory serves, and I certainly speak under correction, it was supposed that Pascoe gave a man laudanum, in mistake for tinct. rhei. Whether such was the case or not, I do not know, but the evidence broke down altogether for this reason: the contents of the man's stomach were saved and given to a duck, which lived, and sustained no injury from the dose. I am heartily sorry to mention these things; but, as Mr. Moorman has unnecessarily dragged them into this correspondence, I feel bound to state all I know, and defend an unhappy brother, who is immured within the walls of a gaol, incapable of defending himself. Sorry to have taken up so much of your valuable space, I now conclude, hoping that the representations of the Medical Profession in the right quarter, will produce the desired result. I have forwarded letters to the Home Office and to Mr. Justice Erle. I am, &c.

ANDREW HINGSTON, M.R.C.S., L.A.C.

Liskeard, Cornwall.

(COPY.)

[To the Editor of the West Briton.]

SIR,—In reply to Mr. Andrew Hingston's letter to you on the subject of my evidence, as given at the trial of William Hamlyn Pascoe, I beg to say, that I am quite certain Mr. Hingston has a right to question the opinions of myself or any other person upon medical points; but I am not so sure that it becomes him to accompany his opinions with imputations upon the character of another man who may hold opinions adverse to his own. I assure him, too, that my evidence was not given without first consulting authorities upon the subject; and as I consider the columns of a newspaper to be not the most proper for giving medical subjects, he will find in the *Medical Times and Gazette* of next Saturday, a statement of the grounds upon which my opinions were formed.

I am, Sir, your obedient,

St. Columb, April 19th, 1852. W. MOORMAN, Jun.

IV.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your readers will not envy the thoughts of the Mr. Moorman who gave evidence in the case of that unfortunate victim of trial by "his peers,"—Mr. Pascoe. If your report contains *all* the grounds from which a guilty intent was assumed, I can only say, that *I* deserve transportation for ten

years as much as Mr. Pascoe. I happen to have a patient suffering from amennorrhœa at the present time, who has been taking savine, together with aloes and the steel mixture, for three weeks past. I have little doubt there may be two or three hundred instances in the kingdom of the same kind.

For the sake of justice, Sir, pursue this matter in the proper quarter. To my own mind, being a stranger to the circumstances, except as you narrate them, and to the parties, the evidence on which Mr. Pascoe was condemned carries the strongest conviction that he was innocent. I hope the Profession may speak out and save the victim. I am, &c. M.D.

V.

[To the Editor of the Medical Times and Gazette.]

Sir,—I trust it is not necessary to appeal to any great names in order to remedy the injustice done to Mr. Pascoe, if your suggestions are correct, as appears most probable.

Mr. Moorman's remarks appear to me both unjustifiable and cruel. Permit me to mention, that I once knew a medical practitioner so completely ruined as ultimately to lead to his resorting to intemperance and suicide, although he had a large family, by the evidence of a physician, and, as a result of that evidence, the censure of the presiding judge, and loss of his action, and in fact of his entire practice. The action was for medicines and attendance in a case of secondary syphilis; the physician referred to swore that he believed in such, and indeed in all cases, that sarsaparilla was of no more use than so many chips of deal. I may add that this same physician, although he was very highly connected professionally, met a few years after with a case so puzzling, and in fact discreditably fatal, that he prudently retired from the Profession.

I am, &c. M.D.

VI.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have read with much surprise and no less pain your extracts from the newspaper account of the trial of Mr. Pascoe, and I agree most fully with the observations in your leader upon this most remarkable case. It appears to me extraordinary, that a judge should propose such questions as appear in this case to have been proposed, while questions of vital priority (if such an expression may be allowed) were passed over without the slightest attention. A medical practitioner, however competent to the ordinary duties of the profession, is questioned as to his opinion upon certain abstract points of casual occurrence, but still requiring an intimate knowledge of jurisprudence, and perhaps the greatest depth of thought, and the most careful and cautious reflection.

I shall not criticise the charge to the jury,—it would occupy more time than perhaps would be beneficially so employed. But it may be worth while to observe, that a person, confessedly ignorant of the common literature of his Profession, is called upon to state his opinions upon certain matters, and these crude notions submitted to the jury as dogmas upon which their verdict is to be based.

From the fact of Mr. Pascoe having examined the breasts of the patient, I think it probable that she informed him she was labouring under amenorrhœa; and, naturally enough, as was his duty, he looked to the breasts to assist him in diagnosing the cause. That the mammæ afforded no indications of pregnancy, may be inferred from his prescribing the compound mixture of iron; and we may further infer, that, this proving ineffectual, Mr. Pascoe resorted to savine, which he, like others, may be in the habit of prescribing in such cases.

That savine is regarded as an emmenagogue will appear by reference to Murray's "Materia Medica," where it is stated:—

"Savine is a stimulant, the operation of which has been supposed to be powerfully directed to the uterine system; so much so, that, according to the common opinion, it is capable of producing abortion; but this is doubtful. It appears to possess greater powers as an emmenagogue than any of the substances which have been mentioned, and is sometimes given with advantage in amenorrhœa."(a)

If the medical gentleman who bore so hardly upon his professional brother had consulted the Materia Medica of the College of Physicians of London, he would have found juniperus sabina included in the list, and that the "fresh and dried tops" are the parts specified for use. Had he consulted Murray, or, if he preferred the more recent authority, "Phillips' Translation of the Pharmacopœia of the Royal College of Physicians, London," he would have founded it stated, that the dose of the fresh leaves is, according to Murray, from a half to one drachm; to Phillips from ten grains to half a drachm.

It is to be greatly lamented that our courts of law are left to seek illumination from persons whom chance may throw in their way, and who have paid so little attention to those often delicate and intricate distinctions as to be wholly unqualified for such nice discriminations. Persons of known capability should be appointed to attend, and assist the judges upon occasions of such deep importance.

Much stress has been laid upon no initials being attached to the prescription. Mr. Pascoe, not being a physician, was not legally entitled to put his initials to a prescription; and suppressing the name of the patient might have been from motives of delicacy. No man with such intentions or motives as those attributed to Mr. Pascoe would have openly sent out his prescription, or delivered it to the patient, to be sent, in the ordinary way, to a chemist for preparation. That Mr. Pascoe has suffered a great wrong there can be no doubt: the mode of repairing it is probably by a memorial to the Secretary of State. Should such be adopted, I shall be ready to attach my humble name to the document.

I am, &c. Justitia.

[We must now terminate our correspondence upon this subject; and we do so the more readily since we have reason to entertain the most confident expectation that our exertions in this case have exhibited the entire failure of Mr. Moorman's evidence, and will insure a free pardon to Mr. Pascoe.—Ed. *Medical Times and Gazette.*]

(a) Murray's Materia Medica, pp. 281, 282.

STATISTICS OF THE ROYAL MATERNITY CHARITY.

[To the Editor of the Medical Times and Gazette.]

Sir,—I send you a summary of the cases that occurred in the Eastern District of the Royal Maternity Charity during the last year, similar to those which have on previous occasions been published in the *Medical Gazette*. As I have resigned my appointment in that charity, this is the last report that I shall have the opportunity of laying before the Profession. I am, Sir, &c.

Francis H. Ramsbotham, M.D.

7, Portman-square.

During the year 1851 there were delivered under the superintendence of Dr. Ramsbotham 1432 women; of which cases

1 was a triplet; the children were all females; the first presented with the head, the second with the knees, with this child the funis also prolapsed; the third with the breech. They were all fully as large as individual twins usually are, and were all living and healthy a month after their birth.

11 were twins,—1 in about every 130 cases. Of these, in 5 cases, both heads presented; in 1 both were breech or inferior extremities; and in 5 the presentations were head and breech, or inferior extremities. In 3 of these cases the children were both boys; in 5, both girls; and in 3, 1 boy and 1 girl.

Of the 1445 children—

758 were males,

687 were females.

1414 were presentations of some part of the head; of these, 5 were face presentations; 1 in every 289 births.

26 were breech presentations,—1 in about very 55½ births.

5 were transverse presentations,—1 in every 289 births. In all these cases the shoulder presented; all the women were delivered by the operation of "turning." In 1 case there was considerable hæmorrhage for four or five hours before delivery could be accomplished. The child was born living, and the woman did well. All the women recovered; but 3 out of the 5 children were born still.

In 3 cases the placenta was implanted completely over the os uteri; 1 in about every 477 cases. All these woman were delivered artificially. 1 was in the eighth month of pregnancy. She had suffered three or four attacks of hæmorrhage at different times, before labour set in; and, when the process was established, lost much blood suddenly. In a few days after delivery pneumonia supervened, and she had a very protracted recovery. Another was at the full period, and, though the flooding was very copious, she recovered well. The third was a case of great interest and rarity. The woman had had a large family, and, as I was told, had three or four times been severely affected with syphilis. For some weeks before labour she had suffered from violent pain, deep-seated, behind the right groin, and during that time had been the subject of several attacks of rather profuse hæmorrhage. She had been under the care of one of the district surgeons, and I did not see

her until a week before her delivery. She was then much emaciated, and had the appearance of a person who had lain for some time under low fever. The whole uterus was very tender; but low down on the right side, the pain on pressure was so acute as to preclude any very minute examination. There was no external swelling perceptible. A constant discharge of blood and sanies of a most offensive character was going on. Examination per vaginam discovered the os uteri sufficiently dilated to admit the extremities of two fingers, hot and exquisitely tender, and the placenta was detected entirely covering it. As there was no indication of uterine action, I did not think it prudent to attempt delivery then, but contented myself with watching her closely. The passage of the urine gave some pain; but defæcation was attended with more. The hæmorrhage ceased during my attendance, and the woman appeared somewhat better. After the lapse of a week, the midwife came to me one evening to say, that the placenta had just passed externally with considerable flooding, though there had been scarcely anything like uterine action. I saw her immediately, and found the placenta in a chamber-pot, most offensively putrid; so much so, indeed, that I was glad to separate it, by dividing the funis, and to send it from the room. There was also in the same vessel a fresh coagulum, that would have filled a quart measure. The os uteri was not entirely dilated, and was still very hot and tender; the breech was at the brim; there was a draining of blood then going on. The woman was evidently sinking, and it seemed to me better to deliver her than to allow her to die with the child in utero. I therefore brought down a foot. As the breech was passing the os uteri I felt a rent take place, most probably both in it and in the vagina, though the extraction called for very little effort. Immediately a quantity of fetid pus escaped,—certainly more than a pint. The child was very putrid, and the cranium was greatly distended with putrefactive gas. After the child was extracted, a large discharge of horribly-stinking pus took place, mixed with a considerable flow of blood. The poor creature died within an hour of delivery. An examination was not allowed; and I cannot, therefore, positively state the seat of the abscess. It appeared to me, however, that it had formed in the cellular substance on the right side of the pelvis, and that the os and cervix uteri had become inflamed and softened, in consequence of its proximity to the sac in which the pus was secreted.

Three were complicated with dangerous hæmorrhage before delivery, at full time, *not* the result of placental presentation,—one in about every 477 cases. In all the child was expelled naturally, and all were still. In all these cases the flooding ceased on the artificial rupture of the membranes.

In 12 cases, the placenta was retained within the uterus after the child's birth, either by atony or irregular contraction of the uterine fibres, or by morbid adhesion between the placental and uterine surfaces, requiring the introduction of the hand for the purpose of removal,—1 in about every 119·3 cases. One of these was after the expulsion of twins, each of which was much larger than single children usually are, both the placentæ being retained; another after the operation of craniotomy had been performed.

Three were complicated with dangerous hæmorrhage after the expulsion of the placenta,—1 in about every 477 cases. In one case, the discharge appeared to be produced by a woman putting a hot plate enveloped in flannel over the uterus, soon after the departure of the midwife, to allay the violence of the after-pains. The midwife had left the uterus well contracted, and the woman apparently safe. On being summoned back again, she found the uterus relaxed, and filled with coagula. The patient had a narrow escape from death. Another was a very unusual case. There had been hæmorrhage to an extent to give some alarm soon after the expulsion of the placenta; this was arrested by pressure and cold applications. The woman went on very well for a fortnight, had left her bed, and seemed recovering satisfactorily. On the evening of the fourteenth day after delivery, I was summoned hastily, in consequence of a fresh eruption of blood. I found that she had been subjected to a sudden and violent fright, which had produced much agitation. Copious flooding commenced almost immediately. When I arrived she was blanched and faint. Notwithstanding the fundus uteri could be felt through the abdominal parietes, just peeping up above the symphysis pubis; it did not seem as though the organ had relaxed much, if at all. Cold applications controlled the flow, and the woman gradually recovered. The other attack was six days after labour. There had been some hæmorrhage during the latter part of pregnancy, but none in the labour.

There was one case of puerperal convulsions at full time. The patient had six fits on the ninth day before labour came on. They ceased on the employment of the ordinary means, and recovery appeared to be perfectly established. She went through her labour also very well, without any recurrence; but the morning after her delivery two fresh fits came on. Quiet, cold to the head, and purgative medicine, relieved her. Headache continued for three or four days, but after that her convalescence continued uninterruptedly.

Three were delivered by craniotomy,—1 in about every 477 cases. In all these cases there was a contraction of the pelvic brim in the conjugate diameter. In two, it was the patients' second child; they were both face cases, and the women had both been delivered by craniotomy in their previous labours. The third woman also had a contracted pelvis in the conjugate diameter of the brim. She had been the subject of three or four lingering labours, and, in her last, was delivered by the long forceps. On this occasion, the district surgeon applied the long forceps, and used as much exertion as he deemed he was justified in doing, without avail. As the woman was in a state calling for delivery, and as the anterior lip of the os uteri was pinched between the head and the pubis, and much swollen, he thought it right to open the child's head, and terminate the labour at once. The patient recovered without a bad symptom.

Four were delivered by the forceps,—1 in every 358 cases. One of these was a first labour; the woman died on the eighth day after delivery, from peritonitis. One was a sixth child; the head had turned, with the face to the pubis. One was a twelfth child, and very large. One woman's pelvis was small throughout; she had been delivered twice before by instruments.

In one case, premature labour was induced between seven and eight months, in consequence of there being a distorted pelvis. This was in January. I had brought on labour prematurely for the same patient three or four times before; and I did it again last month (March). On the occasion in 1851, now under consideration, she took half-a-drachm of fresh ergot in infusion every six hours for nearly a week; slight uterine pains supervened after she had taken ten or twelve doses; and on the seventh day, when I examined, I found the os uteri dilated to the size of half-a-crown, and the membranes rather tense, head presenting. I ruptured the cyst, expulsive pains came on in about eighteen hours, and she was soon after delivered of a live child. The same occurred in March last, under the same treatment, only that she took the ergot rather longer, and active labour came on more speedily after the membranes were ruptured; whereas, in the year 1849, labour was induced by the ergot alone, the membranes rupturing spontaneously, as recorded at page 793 of the last volume of the *Medical Gazette*.

Maternal Deaths.

3 women out of the 1432 delivered, died within the puerpera l month—1 in about every 477 cases—1 nine days after delivery, from pneumonia (this was in January;) 1 in eight days, from peritonitis, after delivery by the forceps; 1 within an hour after delivery, under placental presentation, with an abscess in the pelvis, as more particularly detailed above.

1409 children were born living;

36 still,—1 in less than every 40 births.

Of the Still-born Children,

7 were premature; of these 3 were putrid, and 3 were breech presentations; 1 was a shoulder presentation; 1 woman had met with an accident a fortnight before.

13 were putrid, at full time, or nearly so.

2 were breech presentations at full time; they were both first children.

3 were delivered by craniotomy.

1 was delivered by the forceps.

1 was a second child of twins.

1 was after the woman had suffered a fright three days before her labour.

2 were transverse presentations at full time.

1 was under placental presentation,—the case of abscess in the pelvis,—the child putrid.

3 were after dangerous accidental hæmorrhage.

In 1 case the pelvis was distorted; but the child (a boy) passed without assistance. This woman had had 3 children before—2 boys, both dead; one girl, living. This may be accounted for, perhaps, by the fact, that the heads of male children are usually somewhat larger than those of female.

1 was at full time, not putrid, nor delivered by art.

ON THE UTERINE SOUND.

[To the Editor of the Medical Times and Gazette.]

SIR,—I regret that an accidental error should have occurred in one of my former letters, or that any misapprehension as to the meaning of a phrase should exist. I will, however, re-state the

facts, in the hope that this time they may be stated more clearly In October and December, 1851, Dr. Rigby published two papers, illustrated by cases, on dysmenorrhœa, wherein he divides this affection under two heads—mechanical and functional. Mechanical dysmenorrhœa is there considered to arise from a contracted or closed state of the os uteri, or canal of the cervix, in consequence of which the fluid is discharged with difficulty and much suffering, or altogether obstructed; and, to cure this affection, the contraction is recommended to be dilated by blades made of well-tempered steel, or slit open by a knife ingeniously contrived for the purpose. The same treatment is applied to the virgin as to the married female, and a case is given of this said mechanical obstruction occurring in a virgin female—Miss B., aged 36—wherein, on the examination, *per vaginam*, it is said, "the uterine sound passed rather more than 2½ inches." Now, could this be done when the os uteri, or canal of the cervix, was in a contracted or closed state? Unquestionably not. Nor could it be done in the healthy condition of the uterus,—for the internal orifice of the uterus, especially, is not of sufficient size to admit the uterine sound to pass, the bulb of which measures half an inch in circumference, or more than one-eighth of an inch in diameter. Nay, further, if the sound did pass more than 2½ inches—and we are bound to admit that it did, seeing that it is so stated—the os uteri or the canal of the cervix could not have been contracted, but must have been morbidly dilated, and consequently would afford no obstruction to the fluid when discharged. It hence follows, that this model case of mechanical dysmenorrhœa from obstruction is, from Dr. Rigby's own showing, not a case of obstruction, that the diagnosis was erroneous, and that the treatment employed was uncalled-for, and consequently improper.

It is unfortunate that Dr. Higgins is open to a somewhat similar charge; for in his paper on "The Uterine Sound," Feb. 28, p. 210, a case is given of "dysmenorrhœa from occlusion or stricture of the os internum uteri," wherein this is said to have been ascertained by the sound. Now, the bulb of the uterine sound is much too large to pass the os internum uteri, and hence could not afford any indication of a constriction of this orifice. Surely, then, these are cases of malpractice with the uterine sound, and not examples of any practical use to which it may be applied.

I am not surprised that Dr. Higgins should feel angry when he finds his various reasons for the employment of the uterine sound shown to be rather no reason at all, or cases of malpractice. And on reflection, he will perceive, that the task of pointing this out is an invidious one, and can only be done under an assumed name. "With a simple desire for truth," it is required that published statements should be freely examined, with the view of ascertaining whether they bear the interpretation put upon them; and this can be as well done under one name as under another. No doubt it is a wise decision to avoid discussing this question, for it would be inconvenient to those who use the uterine sound to have it shown that the employment of the instrument, except in rare cases, leads to no practical advantage, while it is liable to create much serious mischief. I am, &c. M. D. Londin.

CALCULUS OF THE BLADDER ON THE BANKS OF THE RHINE.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having been requested by my much-respected friend, the late Dr. Prout, to ascertain whether calculus of the bladder was really, as reported, a disorder of rare occurrence on the banks of the Rhine, I addressed myself for information to the late Dr. Leydig, who deservedly ranked at the head of his profession in the city of Maing. His answer places the subject in so striking a point of view, that I am induced to send you a translation of it, thinking that, although the date is somewhat ancient, it may prove interesting to the readers of the *Medical Times and Gazette*.

I am, &c. Al. Henderson.

Curzon-street.

In your esteemed letter of the 16th instant, you have been pleased to submit to me the inquiry, whether calculus of the bladder was a complaint unusually common in this locality; and, if so, whether or not the cause of its occurrence was to be referred to the more or less free use of the wines of the country.

In answer to these questions, I beg to state, that, during the thirty-two years that I have been settled here, and have practised as consulting and operating surgeon in a circle of fifteen leagues and upwards, comprising the localities where the principal Rhine wines are grown, I have met with only five cases of vesical calculus, and none of them in patients belonging to the higher classes. The first was in a butcher, 65 years of age, at Bretsenheim; the second in a peasant lad, of 25, from Nackenheim; the third in a widow, 34 years of age, from Strasbourg; all of whom were successfully operated on and cured. The other cases which came under my notice were in a Turkish Jew, who stopped here on his travels, and in an old man of 70, neither of whom would submit to an operation, and who both were victims of the disorder. Besides these cases, I have never heard of any occurring in this district during the above-mentioned period, nor, as far as I am aware, has there been any operation for the stone by other practitioners; and my highly-respected teacher, the late Professor Weidmann, has often expressed to me his regret, that, during an extensive practice of twenty-five years in this town and neighbourhood, he never had an opportunity of performing the operation of lithotomy, and had met with only one case of urinary calculus, viz., in a child, whose parents would not consent to an operation.

The result, then, of my own experience, as well as that of my illustrious predecessor, is not in favour of the frequent occurrence of urinary calculus in this locality; but, on the contrary, tends to prove that the cause of the rarity of the disorder among us, and particularly in the higher classes, is to be found in the goodness, and purity, and peculiar qualities of the wines with which the country abounds, and which have long had, and still deservedly maintain, the repute of being an excellent preservative against this disease.

I beg to renew the assurance of my highest esteem, and have the honour to be, your most obedient servant,

Dr. Leydig,
Privy Counsellor and Surgeon-in-Chief to H.R.H. the Grand Duke of Hesse-Darmstadt, etc. etc.

Maing, May 20, 1826.

THE LARGE PAYMENTS UNDER THE PROPOSED NEW CHARTER OF THE COLLEGE OF PHYSICIANS OF LONDON.

[To the Editor of the Medical Times and Gazette.]

Sir,—Will you permit me to call the attention of my brother physicians in England and Wales to the heavy taxation the Royal College of Physicians proposes to inflict upon us? It appears from a draft copy I have had the opportunity of examining, that the physicians in the provinces will have to pay on admission to this virtually new College, the sum of 15*l.* 15s., exclusive of stamp-duty. They are then, however, only "members;" if they proceed to the higher rank of "fellows" they will probably have to pay an additional sum to the College funds (not specified in the Charter), and an additional tax to Government. This may be taken to be the same as at present, viz., 30*l.* to the College, 25*l.* tax.

	£	s.	d.
Member's fee	15	15	0
Stamp-tax on parchment	15	0	0
Fellow's fee	30	0	0
Stamp-tax on parchment	25	0	0
Total payments	£85	15	0

Or 40*l.* to the Government and 45*l.* to the College. These are heavy sums, and deserve the attention of English physicians. So long as the College was content to remain a mere London club, we in the country had little reason to interfere with it, but seeking to control the whole body of English physicians, and to obtain the legal privilege of granting the degree of "Doctor of Medicine," it is really necessary to watch its proceedings, and see whether the steps it proposes to take comport with the dignity and pecuniary and professional interests of the general body of physicians.

As regards the tax it would inflict, I think there can be only one opinion; it is undoubtedly gratuitous, and almost as undoubtedly unjust. The greater number of us have already paid a heavy stamp-duty upon our diplomas; we are also taxed to the Income-tax, and to the assessed taxes for our servants, horses, and carriages, used solely, in the greater majority of instances, for professional purposes; so that, as regards taxation, we are by no means a privileged body; and, if the Government had directly demanded this additional sum of 15*l.* (or 45*l.*, as the case may be), it would have been considered as simply a case of extortion. Why the College should deliberately more than meet the Government in so unfair a demand, requires some explanation; and until an explanation be given, the grant of this Charter should be resisted by every one who means to stand by his Profession.

The payments to the College have not such a grievous aspect; but still it may not be unprofitable to inquire, why so large a sum is to be paid by the postulants for admission. The College, it is reported, is heavily burdened with debt. If this be the fact, a

balance-sheet of liabilities and assets should be laid before the general body of physicians, so that we may be made acquainted with the actual condition of the College funds. It would be well, also, if there were some statement made public as to the advantages which would accrue to society and to physicians in general by this new incorporation, so that the pecuniary demands may be, in some degree at least, defended on the ground of utility. The College has not only altogether neglected to explain these matters, but has not, so far as I am aware, made even the draft of the new Charter public, or asked the opinion of their brethren as to the new powers and constitution they propose to confer upon the College. This conduct is by no means in accordance with the English method of condnctiog public business, and cannot fail to excite dissatisfaction and distrust. I am, Sir,

MEDICUS ANGLICANUS.

COLLEGE OF SURGEONS' FELLOWSHIP.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am one of those ill-used men, a Provincial Fellow of the Royal College of Surgeons of England by examination. Had I been rejected I should have been ruined, and my diploma is now valueless. After having gained it in the legitimate way, (the only way I was then solemnly assured by the Council in which it could be acquired), I am informed, that all men with a diploma as member of so many years' standing, commencing from such a date, can be elected without examination at all, upon the payment of ten guineas, with the recommendation of six Fellows. Sir, London surgeons are more free than we in the provinces. What "Fellow" in a small town, or in a rural district, would incur the odium of refusing to sign this recommendation for the thickest-headed druggist, who, since scraping through the College with the aid of a grinder, had done nothing but play nurse to old women, and vend scented soap and tooth-brushes for fifteen or twenty years? Not I for one. The College shall not cast the odium upon my shoulders. To many of us the idea occurred of returning the useless parchment, called the diploma, to the source whence it came; certainly I cannot imagine any one, however low, too unworthy of such a degree, the course of which since its foundation has been characterized only by shirking and by sharking.

As to the ten pounds, that may be raised by a Fellowship Assurance office, the Directors of which should be composed of those, who, after such solemn promises, have had the assurance to break faith in so gross a manner with all who have submitted to the ordeal of an examination. We were once called the self-degraded; perhaps we shonld better merit the term of self-stultified. I presume no Fellow by examination will attend the farce of election of members of the Council, or will disgrace himself by attending the dinner. I am, &c.

A PROVINCIAL FELLOW.

CANNABIS INDICA IN TRAUMATIC TETANUS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you allow me to record in the pages of your Journal the history of a well-established case of traumatic tetanus successfully treated by Indian hemp. As you are aware, Dr. O'Shaughnessy used this drug with considerable success in combating this fatal disease, and subsequently Professor Miller published a case in which recovery followed its administration. Every additional testimony to the power of the cannabis indica, over the abnormal condition of the nervous system that appears to constitute the essence of this disease, should, I think, be placed before the medical world with as little delay as possible.

Samuel Chappel, aged 7 years, a healthy, well-grown child, of sanguine temperament, the son of respectable poor people, living in a healthy situation, was struck by a stone on the 16th of last October, which produced a wound about half an inch long, near to the outer side of the right eye. When the wound was quite healed, eight days after the accident, the mother noticed a strange expression of his face, and that he closed the right eye with difficulty. These symptoms increasing, her apprehensions were excited, and the child was placed under the care of my partner (Mr. Cribb) and myself. At this time, Nov. 1, the right eye was widely open, and could not be closed by his strongest effort; the pupils were dilated; there was the mark of a recent incised wonnd on the outer side of the right eye; the mouth was opened with difficulty, and less widely upon the right than the left side; upon coughing or sneezing, the right side of the face scarcely moved; bowels constipated; general health good. Aperients were ordered, and leeches were applied between the wound and the trunk of the facial nerve; poppy fomentations to the side of the face.

3rd.—Much worse; right eye fixedly open, and jaws firmly closed; great difficulty in swallowiog; a few drops passed between the teeth, the attempt producing spasm of the muscles engaged in deglutition; occasional attacks of rigidity of the whole of the frame; some tendency to opisthotonos. His teeth are small (milk teeth) and do not overlap, consequently fluids can be got into the mouth with tolerable facility. Ordered the following: Grain doses of the resinous extract of Indian hemp every three hours, an enema of compound decoction of aloes, tincture of assafœtida, and water; a paste composed of extract of belladonna, blister plaster, and antimony, to be rubbed in over the whole of the spinal column. Strong beef-tea and milk arrow-root. From this time up to Nov. 7 he got daily worse: the attendants experience so much difficulty in giving medicine and food, from the spasms consequent upon every attempt to swallow, that they could not be induced to carry ont our directions, and they were the less disposed to persevere, from a conviction that the boy must die, and an unwillingness to disturb him from the drowsy state induced by the little medicine they had forced down.

8th.—Jaws firmly closed; right eye open and lower lid everted; conjunctiva inflamed; awakes with a cry of horror and rigidity of the whole frame; well-marked opisthotonos; pulse feeble; much emaciated. From this date, by repeated visits, arrangements were made for giving medicine and food regularly, and he took for several days consecutively from a grain to a grain and a half of the extract of Indian hemp every three or four hours, beef-tea, tea with egg, etc. The food was generally given immediately after a dose, as he was then able to swallow better. From the 10th he began to improve, although very gradually—recovering by degrees, first the power of swallowing, then of separating the jaws, and, lastly, of closing the eye. The general spasms became less frequent. By the end of the month he was quite well, and continues so up to the present time.

Chappel took in nine days 64 grains of the extract, in all 162 grains between the 3rd of November and the 3rd of December. The only unpleasant result occurred about November 22; when nearly convalescent, and still taking the extract five or six times a day, it appeared to produce considerable pyrexia and conjunctivitis; these symptoms quickly yielded however to a brisk purgative and greatly diminished doses of the hemp. I believe the preparation to be recent and very good; lately I found such marked effects follow grain doses that were given to two adults, that I was unwilling to continue its use. I am, &c.,

Bishop Stortford. CHARLES F. HODSON, M.R.C.S.

MEDICAL SOCIETY OF LONDON.

[To the Editor of the Medical Times and Gazette.]

SIR,—I will thank you to correct an error in a report of some few observations which I made at the Medical Society of London, at the discussion which followed the reading of my contribution on "Fatty Degeneration."

I am represented to have stated that, "in real apoplexy, bleeding is not practised, as was formerly the case."

I only ventured to say that, as apoplexy may be traced very often to a process of degeneration, resulting from atrophy, our practice, as to blood-letting, should be much modified in not a few cases of this affection; often, indeed, no blood should be taken. But still cases do happen, and that not rarely, in which it would be extremely bad practice not to use the lancet. I am, &c.

Westminster Hospital. W. F. BARLOW.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. HODGSON, Esq., F.R.S., President, in the Chair.

A FEW REMARKS ON THE SURGICAL OPERATIONS USUALLY ADOPTED FOR RETENTION OF URINE,

TOGETHER WITH AN ABSTRACT OF CASES, IN WHICH THE BLADDER WAS PUNCTURED THROUGH THE RECTUM, FOR THE PURPOSE EITHER OF RELIEVING DISTENSION, OR OF FACILITATING THE CURE OF PERMANENT STRICTURE.

By EDWARD COCK, Esq.

The author first dwells upon the difficulties which surround the question as to what course should be pursued in those cases where

an old chronic indurated stricture, recently closed by inflammation and congestion, defies all attempts to pass a catheter, and upon the failure which frequently attends the attempts of the surgeon to relieve such cases by the introduction of sounds, catheters, or bougies. He points out the three modes to which recourse may be had, when the urgency of the symptoms renders some decided interference necessary. First, that of forced catheterism; secondly, that of opening the urethra in the perinæum behind the stricture; thirdly, that of puncture of the bladder. There is nothing new in either of these measures for relieving retention. They may each possess certain advantages, and the circumstances of the case, and the condition in which we may be placed, may incline us to the adoption of either the one or the other. They have all their drawbacks; but, on the whole, the author is disposed to believe that the bladder may be reached with the smallest amount of pain, with the least risk of present or future danger, and with the greatest prospect of ulterior good, by puncture through the rectum. The first of these operations the author regards as in reality a mode of puncturing the bladder with a blunt instrument, tunnelling through the perinæum under cover of the urethra; and he believes that the stricture is, in the majority of such cases, neither forced nor crushed, but that a new passage is made outside the urethra, which may either re-enter it, or continue its course through the prostate into the bladder. The urgent symptoms may be thus relieved, but the after condition of the patient is not bettered, and it may be rendered even worse. The second operation, that of section of the perinæum, the author thinks, is, when dexterously and successfully performed, preferable to forcible catheterism. The urine may be allowed to flow by the new channel, until the urethra has had time to recover itself from the injuries it may have sustained by previous manipulation, or from the irritation caused by the continual pressure of the contents of the bladder. But, unfortunately, the difficulties are often so great, in long-standing disease of the perinæum, that the urethra cannot be reached, and great mischief, or even death, may result from the protracted operation. The author describes the proposed modification of this practice, called "cure of stricture by division," of which the principle consists in uniting the upper and lower permeable portions of the urethra by the division of the intermediate impermeable portion, and thus restoring the integrity of the canal. This, however, he thinks, is very rarely carried out; and that very often death is caused unmistakably from the injuries sustained during the operation. So convinced is the author, by experience and observation, of the difficulty which frequently attends the operation of opening the urethra behind the stricture, where the landmarks which should guide us are obliterated, that he has of late years abandoned the operation of incising the perinæum with a fixed determination to reach the bladder. In those cases where retention and extravasation render it necessary that an outlet should be afforded to the contents of the bladder through the perinæum, he limits himself to making a free incision down to the region where the urethra may be supposed to be situated; and if he cannot then gently introduce a catheter through the wound into the bladder, he does not proceed any further; and he has generally found that the urine has speedily made its way through the wound. With regard to the third mode of relieving the bladder, by puncture, the author brings forward cases to show that puncture by the rectum is safe and simple. Forty cases of operation by the rectum are related. In all of these, the operation was entirely successful, so far as the relief and the absence of any ill consequences from it were concerned. Seven deaths occurred from various causes connected with the previous sufferings of the patients, such as diseased kidneys, inflamed bladder, etc. In many cases, the author believes the operation to have materially tended to the restoration of the patient, with a less amount of suffering, and, at the same time, more speedily and effectually, than could have been effected in any other way.

Mr. Solly thought the Society were much indebted to Mr. Cock, for calling their attention to the value of the operation described by him in his paper. He had heard Mr. Cock speak of it several years ago, and he had since repeatedly performed it with success, but in cases which had been selected for the purpose, and which, consequently, did not bear so great a value in estimating its importance. He (Mr. Solly) considered this operation to be one of the least dangerous that can be performed in cases of retention of urine from stricture. There are cases, of course, in which it is advisable to cut down upon the urethra, such as those where the stricture is of traumatic origin, but in cases where the canal has been much damaged, and where false passages exist, he thought this operation was one of the least dangerous in surgery.

Mr. Arnott, though not able to speak of the operation of puncture of the bladder through the rectum in the same unqualified terms of approbation as the author of the paper and Mr. Solly had done, was yet able to add his testimony generally in its favour from a personal experience of five cases in which he had performed it; and he thought the thanks of the Society were due to Mr. Cock for having brought the present collection of cases before it. Mr. Arnott had only resorted to the operation in cases of retention of urine supervening on permanent stricture where other means of relief had failed; but, having witnessed incidentally its advantages in facilitating the subsequent treatment of the stricture, which had rendered the operation necessary, he was prepared to receive favourably the suggestion to resort to it occasionally in the treatment of stricture. But before further adverting to it, he might be allowed to observe, that he thought Mr. Cock had been too severe in the language he had used with regard to the operation of what was called forcing the stricture, and also in regard to the other operation of opening the urethra behind the stricture. Both these proceedings, properly performed in suitable cases, were justifiable and safe. The operation of forcing a stricture was not so severe a proceeding as puncture of the bladder from the rectum, and it had some advantages; and if it were his own misfortune to have retention of urine from stricture, he would, in the hands of a surgeon who knew his business, prefer that the forcing the stricture should be tried upon him, before submitting to having an opening made in the urethra behind the stricture, or the bladder punctured from the rectum. What he meant in speaking of the operation being properly performed was this, that, if upon trying to urge the catheter through the stricture, the urethra itself should give way and be perforated, then that the proceeding should be immediately abandoned. So also with regard to the opening the urethra behind the stricture; the best mode of doing this was not the usual one of cutting from the surface or skin inwards, but by putting the fore-finger of the left hand into the anus so as to depress it, then to introduce the point of a bistoury only slightly curved just in front of the anus, and carry it directly inwards so as to strike the dilated membranous part of the urethra, and then hooking the instrument outwards to divide all the superjacent parts. Mr. Arnott had first seen this mode of operation employed by Sir Charles Bell, twenty years ago, and he had frequently performed it since with success. If you missed the urethra, you could then resort to puncture of the bladder. With reference to the last operation, which was one which had been employed at the Middlesex Hospital, he had not found it so entirely destitute of disadvantages as Mr. Cock. Of the five cases in which he had employed it, one patient died; and on examination an abscess was found between the bladder and rectum in the track of the canula. Effusion of urine in this situation was a danger to be dreaded, and he had expected that it would have occurred in some of Mr. Cock's cases; and, gratified as he was by hearing the short abstracts of some of them read, he should like to look over the details of the whole, before he could satisfy himself that the danger was not real. Perhaps he should best explain his views with respect to the employment of these different operations, by relating a case in which he had performed all three on one patient within a quarter of an hour. In 1844, he had been called one morning to an officer of engineers who had retention of urine from stricture, and who had had a similar attack some years previously. The patient was 6 feet 6 inches in height, of large frame, and partially palsied on one side, rendering him very cumbrous to move. An attempt was made, but without success, to introduce an instrument into the bladder. Large and repeated doses of laudanum, at short intervals, by the mouth and by the rectum, were exhibited, and at the end of some hours a fresh attempt was made, without success, to pass a catheter; but, as a small quantity of water had dribbled away, the patient was now purged, cupped on the perinæum, etc. On the following day, the quantity of urine passed was not considerable, yet the relief was such as to lead Mr. Arnott to hope that the difficulty in the case had been got over. Early the next morning, however, he was again summoned to the patient, and found that he had passed no water since the preceding afternoon, was greatly distressed, the distended bladder reaching half way up to the umbilicus. Deeming that the case did not now admit of delay in obtaining relief, he first endeavoured to force the stricture, but, in the attempt, the urethra was perforated, and the catheter was at once laid aside. Mr. Arnott then explained to the patient's brother, a physician, that he would try to open the urethra behind the stricture, in which endeavour he had generally, in cases of this kind, succeeded; but, in the present instance, he did not feel so confident, as there had not been much previous suffering from the stricture, or push upon the parts, so that possibly the urethra posterior to the stricture was not dilated. If he failed, he should then puncture the bladder by the rectum. The attempt to lay open the membranous part of the urethra was made in the way already described, but the urethra was not struck. The bladder was then immediately punctured through the rectum. Mr. Arnott saw the patient twice during the day, when the urine was

flowing freely through the canula. But next day he was called to the patient, and learned that in the previous afternoon the canula had got displaced,—it was, in fact, out of the bladder,—so that no urine had since passed either way. The bladder was now full, and, after a short but unsuccessful attempt to pass a catheter by the urethra, the bladder was again punctured per rectum. The canula was kept in for sixteen days, when an instrument was got through the urethra into the bladder. The case did well, and the patient is still living. In one instance it appears that Mr. Cock had failed to reach the bladder in the attempt to puncture it through the rectum; but failure to strike the bladder was not confined to puncture in this situation. Mr. Arnott had twice witnessed, in the hands of very able surgeons, the bladder missed in the attempt to puncture it above the pubes; in one of these cases, the trocar was re-introduced, and with success. He might add, that both cases recovered.

Mr. Coulson said, that the great point connected with this operation was, that it might be done with ease and safety; he had performed it twice within a short time on the same patient. He thought that the great reason why it was not generally adopted was, that it does not touch the cause of the retention. Liston condemned it in strong language in his work on "Operative Surgery." Mr. Cock, in one of his cases, passed a small instrument into the bladder before he performed the operation; now, there was no reason why he should not have retained that instrument, and thus have avoided the necessity for the other proceeding. He should not himself be inclined to practise the puncturing of the bladder by the rectum in cases of extravasation and urinary abscess; free incisions would be quite sufficient to afford an exit for both the urine and the matter. In the class of cases where there exists an obstinate stricture, and there is no possibility of passing an instrument, life is at stake, and there is no alternative. In some of Mr. Cock's cases the urethra became pervious after the operation. He should not expect this to occur in all cases. In a case in which the canula had slipped out, and the hole made by the trocar could not be found, the permeability of the canal had not been restored, and it became necessary to divide the stricture with the lancetted stilette. If he could get a small instrument into the bladder during the existence of retention, he (Mr. Coulson) should prefer Syme's operation, or, if there were not any great urgency, he should practise the old operation described by South, in his edition of "Chelius' Surgery;" he should pass a grooved staff down to the stricture, and then cut down upon it through the perinæum beyond the stricture, then pass a strong straight director, deeply grooved, in the median line between the urethra and the rectum; next run a straight bistoury some distance in its groove, and afterwards cut outwards and upwards towards the staff in the canal.

Mr. Solly remarked that Mr. Liston, before his decease, recanted his error, as regarded this operation, as he was present when Mr. Liston performed it on a solicitor, in Mark-lane, about seven months before he died.

Mr. Campbell de Morgan observed, that he had not read all the cases in the paper, but they all supported the same views, and showed that the operation did not remove the cause of the retention, as Mr. Coulson had remarked: but, in all operations performed on that account, the urine, after a time, passes more or less by the urethra, just as in the cases lately before the Society of stricture of the colon, where, some time after an operation had been performed, the fæces began to be discharged by their proper outlet, the anus, so that, after all, this operation of puncturing the bladder by the rectum is, in some degree, a cure for the cause of the retention.

Mr. Curling had listened with a good deal of attention to the cases in the paper which had been read to the Society, and, so far as he could judge from the brief details given, he had no objection to make to the puncture of the bladder in the instances cited. In the second case, it did not seem quite clear whether the abscess in the perinæum existed at the time of the operation, or had formed afterwards; but he did not believe that so excellent and experienced a surgeon as Mr. Cock would venture to puncture the bladder by the rectum in a case of retention of urine with perinæal abscess,—he would relieve the patient by a free opening at the part. Mr. Curling agreed with the author of the paper in the opinion, that the operation was more free from risk than was generally supposed, and in giving it the preference over forced catheterism. He was quite sure, that Mr. Cock, in treating of the latter proceeding, did not object to the perforation of a stricture by the skilful use of the catheter, but to the violence inflicted when the instrument was driven out of the passage, the course of which in its progress to the bladder had been so graphically described in the paper. Still, he was surprised to find that Mr. Cock had had occasion to puncture the bladder in so many instances. At the hospital of which he was surgeon (the London), cases of retention of urine were of very common occurrence among the dissolute population in the neighbourhood; and no less than 146 cases had been admitted in the past year. Yet this operation was very rarely performed, and he did not believe that the bladder had been punctured a dozen times during the past twelve years. He attributed this to the remarkable success attending the general treatment without instruments, by means well known to the Fellows of the Society. After the retention had been relieved in this way, and the local irritation had subsided, the cure of the stricture could then be conducted with as much advantage, as after the bladder had been punctured by the rectum. In the very few cases in which he had found it necessary to operate, he had punctured the bladder above the pubes, which, he believed, was as simple and as free from danger as the puncture by the rectum.

Mr. Gay said, from the experience he had had of the practice of puncturing the bladder from the rectum, he could speak of it in the highest terms, but only in a certain class of cases, viz., those in which spasm and inflammation suddenly supervened on old stricture, and retention with all its evils followed; of this class of cases, he (Mr. Gay) had not been able to detect many among those which had been read in connexion with Mr. Cock's observations on this subject. It was now six years since he (Mr. Gay) was called to see an old gentleman labouring under the severest symptoms, arising from retention of urine. He had suffered for many years under stricture, and the day before, after drinking hard, and being exposed to cold, the retention commenced. Many futile attempts had been made to pass a catheter into the bladder, and the urethra had thereby become severely lacerated. Hot baths, opium, leeches, &c., were had recourse to, and it was not until the symptoms of constitutional irritation had reached a fearful height that his assistance was called for. Under these circumstances, he thought it unwise to interfere further with the urethra in any part of its course; and, notwithstanding the bad odour into which the operation of paracentesis had fallen, he determined, but not without considerable anxiety as to the result of the procedure, to relieve the bladder by this method. His object was to put a stop to the fearful effects of an over-distended bladder, as well on the stricture as on the system at large, and thus to allow a sufficient time for that palliative treatment which almost always succeeds in these cases, and that within a moderately short period of time, if judiciously carried out. Leeches were again applied with fomentations, and opium administered internally, and, in twenty-four hours, the disease had so far subsided, that the patient passed his urine, and nothing more was heard of the puncture through the rectum. Mr. Gay thought that the state of the urethra in such cases is of all others most unsuitable to catheterism; and, from his experience in the case he had just narrated, and others which he has had since under his care, he should not hesitate to recommend the bladder to be punctured at any time to relieve the pain and general distress which arise from even temporary over-distension. Mr. Gay had adopted this treatment, in four or five other cases; and, so assured is he of the comparative impunity with which the bladder might in this manner be evacuated, that on one occasion he drew off a patient's urine by this method on three successive days, and no ill results whatever followed. With regard to another class of cases in which Mr. Cock has been in the habit of puncturing the bladder, viz., those of chronic permeable stricture, Mr. Gay had had no experience, nor could he see its utility. It appeared to him that the consequence of this practice was to add to an old stricture the undesirable complication of a fistulous passage behind it, and one which could not advance the cure of the original disease. He thought that in these cases judicious catheterism might accomplish all that could be expected. Mr. Gay felt that, on so important and interesting a subject, every surgeon who had had any experience should communicate it for the purpose of arriving at some really practicable conclusion; and it was this consideration that had led him to make these remarks.

Mr. Hodgson observed, that his own experience did not lead him to regard this operation as so simple and unimportant as it would appear to be from the discussion. There was the danger of wounding the vesiculæ seminales, which had not unfrequently happened, and in one case the inflammation had extended to the testicle, which suppurated. Again, the canula may slip out, and the opening close. There is great difficulty in keeping the opening patent long enough for the passive condition of the urethra to be of service in the restoration of the canal. The practice of passing a catheter or sound through the urethra, not forcibly, but by slow, steady, and long-continued pressure, is generally ultimately successful. This plan, he thought, would in most cases be found preferable to puncturing the bladder per rectum.

Mr. Prescott Hewett intended, in the few remarks which he had to make on the interesting subject before the Society, to confine himself altogether to the question of operating for retention of urine from stricture. He would at once say, that the opinion which he had formed was, that few, very few cases indeed, of reten-

tion of urine from stricture imperatively demanded an operation; and he was surprised to find that so many cases of this class had required an operation in one hospital alone during the last few years. Mr. Curling had stated, that in the London Hospital, operations for retention of urine had of late years been of very rare occurrence; but he (Mr. P. Hewett) would go a step further, and say confidently, that for the eighteen years during which he had been at St. George's Hospital, not a single instance had occurred in which it was found necessary to resort to any operation for the relief of retention of urine from stricture; and yet among the large number of cases of this kind yearly admitted into that hospital were some of a most severe and urgent character. As a matter of course, he had been obliged to operate upon cases of extravasation from rupture of the urethra with retention, which had been brought into the hospital in that condition, but this was altogether a different state of things, and one in which the treatment admitted of no doubt. For many years past, at St. George's, long antecedent to his (Mr. P. Hewett's) going there, cases of retention of urine from stricture have been treated, when catheterism failed, with opium and the warm bath, and for the last eighteen years, to his own knowledge, as already stated, and for some years more, no single instance has arisen where an operation has been required. On one occasion, and on one alone, had Mr. P. Hewett seen even anything like an approach towards such an operation. In this case, the patient, a man of intemperate habits, had been admitted into St. George's with retention of urine from stricture, and some false passages which had occurred during the repeated attempts at passing a catheter into the bladder. Another attempt to get an instrument into the bladder was cautiously made by the house-surgeon, but as this failed a warm-bath was ordered, and some laudanum given by the mouth, and under this treatment the patient soon became easier, and then passed a small quantity of water; shortly afterwards, however, complete retention recurred, and as no relief appeared to be derived from the treatment, the surgeon of the week was sent for, and another attempt to pass an instrument was again made, which also proved fruitless. Under these circumstances, as the bladder was getting largely distended, a question arose as to the propriety of tapping this viscus through the rectum, but as the patient, notwithstanding the great distention of the bladder, did not appear to be suffering over-much, it was ultimately decided that another trial should be made with a full dose of laudanum, two drachms of which were immediately given by the rectum, and within an hour afterwards the patient began once more to pass his water, and gradually emptied the bladder. Let opium be freely given, and, from what he had witnessed, he had no hesitation in stating, that an operation in such cases would be very, very rarely indeed required. In conclusion, Mr. P. Hewett stated, that he had never seen any ill effects arise in these cases from the free administration of opium, notwithstanding that he had in some instances given drachm doses every hour for three and four hours consecutively.

Mr. Charles Hawkins, in agreeing with what had fallen from Mr. Hewett, thought that there ought to be further discussion on the very interesting paper, considering not only its great importance, but the professional standing of its author. He was not satisfied that it should go forth to the Profession that this Society took so very favourable a view of the operation recommended for retention of urine by Mr. Cock as might appear from what had fallen from the previous speakers; for he himself was not satisfied that strictures generally required this operation. He had never heard a paper read in that room which astonished him more, or took him more by surprise than that in which the author related forty cases of "puncturing the bladder" which had occurred in his own practice or in those of his colleagues. Now he (Mr. Hawkins) had known St. George's Hospital longer even than Mr. Hewett—for above twenty years—and he had never known the operation performed there, and he could not learn that it had been found necessary to have recourse to it for nearly thirty years. He knew that those in the most extensive practice at this end of the town had found it necessary to have recourse to it only about half a dozen times in a period of forty years. Therefore it was very astonishing that so many cases could be got together from one hospital, or in the practice of those connected with it; and, indeed, till Mr. Curling spoke, he fancied it must be an operation peculiar to the other end of London; but it appeared that the London Hospital had not produced anything like the number of cases, though peculiarly well placed for bad cases of stricture. He was surprised to hear Mr. Solly talk of the advantage of this operation in cases of spasm. Now, it appeared to him, that those were not the cases for which Mr. Cock recommended the operation, but in those old cases of permanent stricture, where, from constant attacks of retention, and its consequences, the kidneys and bladder were becoming diseased, and under which the patient was likely to sink. In these cases of all the operations—when an operation was required—he believed, that recommended by the author of the paper to be the best. But he thought, in these days, when so many new ways of curing stricture of the urethra were put before the Profession, this Society should be especially careful lest any plan received its sanction without due consideration. He had taken the liberty to address the Society, in the hope of eliciting further information from older Fellows of the Society, and those better able to give it than himself. It was not that he did not think that when an operation for the relief of retention of urine became necessary, that that recommended by Mr. Cock was perhaps the one attended with least difficulty, and followed by fewer bad consequences than any other, but of the results he could say nothing from his own experience. He could call to mind but one case in which the bladder was punctured for retention of the urine that had come under his own care. In that case the operation was performed above the pubes with success, but he had been in the habit of passing an instrument for that patient since without difficulty. Of course he did not allude to cases in which operations had been performed for the cure of stricture where the stricture was permanent, (mostly from accident,) and performed not for the immediate relief of retention of urine. He had assisted at the operation in about half a dozen such cases, where cutting into the urethra through the perinæum was the one performed. He could not conclude without stating his surprise at the large amount of what Mr. Cock called bad surgery related in his paper, which he certainly did not so commonly meet with.

Mr. Curling rose to explain, that, in the cases in which the bladder had been punctured at the London Hospital, he included cases of retention of urine from enlargement of the prostate gland, which had been injured by instruments, and attended with hæmorrhage into the bladder. He would also mention a remedy for retention from stricture, which was not applicable to persons of debauched habits and broken-down constitutions, but succeeded remarkably in robust sailors and others,—he alluded to the administration of croton-oil. As soon as the remedy begins to act on the bowels, the patient is able to pass water.

Mr. Solly explained, that he recommended the operation in cases of permanent stricture, with enlarged prostate, or where great injury had been committed on the urethra. He supposed, from the remarks of the previous speakers, that more bad cases of stricture were admitted into the hospitals at the east than at the west end of the town.

Mr. N. Ward contended, that the operation was admissible in cases of retention with great distension of the bladder, even if it were done simply for the relief of the intense agony and suffering attendant on that complaint, and for the prevention of paralysis of the organ, on account of its simplicity and safety, as shown by the experience of several hospital surgeons.

Mr. Charles Hawkins expressed his surprise that Mr. Cock should have met with so many cases of stricture requiring the performance of such an operation, when so many surgeons longer in practice than himself had not done it once.

Mr. N. Ward had understood that Mr. Charles Hawkins was opposed to the operation altogether in the cases alluded to.

Dr. J. A. Wilson remarked, that, if he understood the debate correctly, this operation is sometimes followed by a fistula, and yet it had been described as simple and safe. He would leave that question for surgeons to settle. How could an operation be either simple or safe if it had such a result?

Mr. Holt remarked, that he entirely concurred in the observations made both by Mr. Curling and Mr. Hewett, and expressed his surprise at the large number of cases in which Mr. Cock had found it necessary to have recourse to an operation for the relief of retention of urine. He had been engaged for the last ten years in endeavouring to procure cases of stricture of the worst possible description, believing every case may be relieved without operation; and, although a large number of cases of retention of urine had come under his notice, yet he had only had recourse to operative procedure in one instance,—the operation consisting in opening the membranous portion of the urethra, which formed an elastic tumour behind the stricture, easily detected, and easily punctured. If the ordinary palliative treatment were had recourse to, and, the first effort failing, no further attempts to pass a catheter were indulged in, in almost every instance the urine would, in a few hours, escape, and in sufficient quantities to obviate all the urgencies of retention, and, in a few days, (the parts in the intermediate time having become tranquil,) a catheter could, in almost every instance, be passed. Were he called upon to perform any operation, he should have no hesitation in preferring, from its simplicity, facility, and immediate relief, that advocated by Mr. Cock. He considered the operation of opening the urethra behind the stricture a most hazardous proceeding, and one which ought only

to be had recourse to in cases where the membranous portion of urethra could be distinctly felt distended by urine. As a proof of this assertion, he might mention a case in which this operation had been attempted by one of the ablest surgeons of the day, a gentleman of vast experience, and who is one of the heads of the Profession, but the patient, from continued disease, died the same evening, and the *post-mortem* examination revealed the urethra completely transfixed, the knife having passed between the bladder and the symphysis pubis. Respecting the operation of forced catheterism, he felt quite assured Mr. Arnott would not sanction that operation in the common acceptation of the term, or, as is recommended by some surgeons, that a catheter *vi et armis* should be forced into the bladder irrespective of the intervening structures; such a proceeding could only be attended with danger, and probably cause the death of the patient. In conclusion, he felt assured that, by patience and proper medical treatment, the cases in which it might be necessary to puncture the bladder through the rectum would be very few in number.

Mr. Arnott, in reference to what had fallen from Mr. Holt, thought he had guarded himself against the supposition of being favourable to the operation of forcing a catheter into the bladder. He had stated, that he thought the attempt to force the stricture a proper proceeding in certain cases; and what he meant he would again state was this: that, with a short silver catheter, gentle but steady pressure should be made on the stricture,—if it gave way, good; but if the urethra yielded, and the surgeon at once knew this by the sensation communicated to the finger, and by the bleeding, then the catheter should be at once laid aside, and the attempt abandoned. Mr. Arnott coincided in the statement, that the opening of the urethra behind the stricture in the way in which it was usually performed, by cutting from the skin inwards, was a difficult, tedious, and uncertain operation. He had experienced the difficulties himself, and he had witnessed the same with surgeons of acknowledged eminence. He had also witnessed the occurrence described by Mr. Holt, of the bladder being opened at the anterior part of its neck. The other mode of operating, by the curved bistoury, is simple and very easily performed.

Mr. Cock had but a few observations to make, in reply to those that had fallen from the other speakers. The operation in question was recommended by him and others as a means to rescue patients from the effects of retention, when all other measures had failed. Some misapprehension appeared to have arisen from the number of cases he had brought forward. If all had been read—which was not the case—it would have been seen that his own cases were only 24 in number, and that the others had been furnished by his friends and colleagues, Messrs. Cooper, Birkett, Poland, and others, and were marked separately in his paper accordingly. Some of the remarks that had been made would lead to the conclusion, that he had been rash in operating, but he could assure the Society that he had only had recourse to the puncturing of the bladder by the rectum as a last resource, except in cases of old impermeable, hardened strictures, with the perinæum in the same state. The cases he had narrated extend over a considerable number of years, and he might state that, when he was assistant-surgeon to the hospital, he had seen every case of retention of urine that presented, and there were often two or three a day, nor did he believe that at this aristocratic end of the town such cases of impermeable stricture were met with as were seen in the more easterly portion. He thought he had shown that this operation was only to be had recourse to in the worst cases, when every other palliative measure had failed; indeed, he thought he had often employed palliatives too long. He had spoken of three modes of proceeding for the relief of retention of urine; the first, by the forcible dilatation; the second, by cutting into the urethra between the stricture and the prostate, respecting which he explained its difficiencies and dangers, all of which were very great, and frequently led to failure; and the third and last, which he had mentioned, (without detracting in any way from the utility of the others,) as being more simple, less painful, and more likely to be followed by a cure. The permanence of a fistula had been spoken of as a drawback; but he (Mr. Cock) had never known an instance of this, when the permeability of the urethra had been restored. One of the virtues of the operation, is the obtaining this persistence, as a sort of safety-valve, until a free passage per urethram has been secured; there is often some difficulty in securing its patency until the canal of the urethra allows the urine to flow away through it. Some of the cases which had not been read would illustrate this point. There is not a fistula through which the urine distils; but when the bladder is distended, an impulse to evacuate its contents ensues, and then the urine is discharged in a gush by the rectum, instead of by the urethra. And it is a great comfort to a patient, after enduring the suffering from such a condition of the urinary organs, to be able to discharge the contents of the bladder in a gush. There is one other point to which he (Mr. Cock) should wish to allude. It seemed to be denied by Mr. Coulson and by Mr. Gay, that the relieving this state of those parts places the strictured portion of the urethra in a better condition for a cure to be effected than previously existed. This denial did not accord with the results of his own experience; every operation by means of which the contents of the bladder can be more freely discharged than was previously the case, must, sooner or later, place the urinary organs in a better condition, the urethra being relieved from the distress and strain upon it, and, consequently, the induration and other signs of disease gradually lessen and disappear.

PATHOLOGICAL SOCIETY OF LONDON.

Dr. Latham, President, in the Chair.

Dr. Sibson presented a specimen of

RED AND WHITE SOFTENING OF THE RIGHT HEMISPHERE OF THE BRAIN,

and gave the following history of the case:—E. B., aged 40, was admitted into St. Mary's Hospital, on the 8th of December, 1851, affected with paralysis of the left arm and leg, with which she had been attacked twenty-four hours previously. She was perfectly sensible, and able to give a good account of herself, her speech being quite unaffected. She stated that she had always been delicate, and subject to headache; that two years before, the catamenia suddenly ceased soon after washing her feet; that for about two years she had suffered from headache, affecting chiefly the right side of the head; and that during the last two or three months the pain on the right side of the head was more violent. Her husband, to whom she had been married upwards of a year, states, that she had, during that time, suffered from headache affecting the right side, and during the last four months with increased severity. She had been often drowsy. Her eyesight, particularly that of the right eye, was affected; she was usually wide of the mark in attempting to thread a needle. She vomited at the commencement of the paralytic seizure. When admitted she was pallid, and anæmic-looking. The left arm was quite powerless, and the left leg semi-paralysed. Sensation was perfect. There was no facial paralysis. There was little perceptible change during the 9th, when she stated, that she felt better, and that she had more power in the leg. On the 10th she protruded the tongue towards the affected side, the right side of the tongue being more rigid than the left. She became drowsy and torpid on the 11th, answering questions when roused in a slow, hesitating way. She yawned occasionally; could not be induced to take her breakfast, and passed her urine and fæces in bed. Her evacuations were copious and bilious. The larynx was drawn somewhat towards the left side. The left sterno-cleido mastoid muscle was rigid. The breathing was irregular, slow, and moaning. During inspiration she dilated both nostrils, and during expiration she occasionally puffed. The left masseter quivered; the left arm and leg lay powerless. When the left sole was tickled, the leg was drawn slightly upwards. The pupils were dilated and sluggish; the right eye was turned outwards. On the 12th she lay as if unconscious; when spoken to sharply she opened her eyes, but did not attempt to speak. The respiration was occasionally stertorous and puffing, occasionally moaning. The left sterno-mastoid was relaxed; the right arm somewhat rigid; the month firmly closed. When the urine was drawn off she moved her right arm and leg, as if semi-conscious. On the 13th, respiration was irregular, with constant moaning, and occasional stertor. The extremities were rigid; the face was flushed; the pulsation of the right carotid was strong and visible, while that of the left was feeble. At 3¼ p.m., she lay quite unconscious, and incapable of being roused, the right pupil being dilated, the left of medium size. The right nostril was permanently fuller than the left, which did not act in the least. The left angle of the mouth was lower than the right, the puffing expiration being usually limited to the left side of the mouth. The left sterno-mastoid was relaxed and did not act during inspiration. The right sterno-mastoid was rigid, and acted freely during inspiration. The larynx was in a central position. There was general moderate stiffness of the limbs. The left arm was moderately rigid, especially the biceps and flexor muscles—the fingers being semi-bent, while the triceps and extensors were relaxed. Reflex movements of the leg were excited by tickling the sole. The pulse was very irregular—12 in the first ten seconds, and 22 during the succeeding ten seconds. This irregularity corresponded with the very irregular respirations, which were sometimes seven, and sometimes thirteen, in twenty-five seconds. The inspirations were deep; each expiration was accompanied by a groan, which was stronger and more struggling when the respiration and the pulse

were simultaneously quickened. The movements of breathing were exactly equal on both sides, varying everywhere, according to the depth of the inspiration, from 6 to 20-100ths of an inch. The abdominal muscles were powerfully contracted during each expiration, when the rigid walls on each side protruded outwards. Hence, during each inspiration, although in front the abdominal walls advanced freely about a quarter of an inch, yet at the sides they fell in, owing to the relaxation during inspiration of the previously rigid abdominal muscles. The right and left scalenus acted during inspiration with equal power. At 4.50 p.m., her pulse was small and weak, the breathing noisy, from the excessive quantity of adhesive saliva and mucus which filled the mouth. The respirations became less and less frequent, and she died at 5 p.m.

Post-mortem Examination, made Forty-six Hours after Death.—The body is muscular and well formed. There is congestion of the right side of the head under the scalp. The calvarium is very thick anteriorly. The vessels over the left hemisphere are distended with blood. Under pressure, the whole left hemisphere is firm; but the right, which is not congested, is soft, pulpy, and yielding over its three anterior fourths. The anterior three-fourths and the superior two-thirds of the right hemisphere are throughout affected to a greater or less degree with red, fawn-coloured, and white softening. Just above the level of the corpus callosum in the medullary structure there is an oblong patch of softening of a dusky-red colour, nearly two inches in length and three-quarters of an inch in breadth. There is a white layer of medullary structure interposed between the grey matter of the convolutions and the patch in question, the outline of which is projected, as it were, in points between the curves of grey matter covering each convolution. The grey matter of the anterior and lateral convolutions is throughout more or less affected, being everywhere softened, and in some parts pale, in others of a dusky violet or red, especially at the recesses of the convolutions. One large deep convolution at the posterior and lateral part of the brain is affected to an unusual degree. It is soft, and streaked throughout of a dark dusky-red, and is deepest in hue at the surface. This convolution forms a red mass of about the size of an oblong walnut. In the medullary structure, which is throughout soft, but entire, there are below the large oblong patch described above several smaller patches of red softening—one of them is of a reddish pink colour, irregular, of the size of a pea, in the middle of the anterior lobe. Another reddish patch, of the size of an almond, is seated just outside the posterior part of the corpus striatum. Behind this is a fawn-coloured spot of the size of a sixpence. Close to the anterior part of the corpus striatum there is in the medullary structure a ring of red softening, with a fawn-coloured centre, the size of a peppercorn. In the anterior portion of the corpus striatum there is a patch of red softening, of the size of a pea. The greater part of the right corpus striatum, and the whole right thalamus, appear healthy. The left hemisphere is firm throughout, and the grey structure is unusually dark; but there is an exception in one of the lateral convolutions, the grey substance of which is markedly thin, firm, and pale. The whole of the base of the brain, the cerebellum, the pons, and the medulla, are firm, the grey matter being everywhere, both in the convolutions and the central masses, unusually dark. The left choroid plexus is more injected than the right. Under the microscope, the capillaries are congested, and the minute arteries ramifying through the posterior convolution affected with red softening are observed many of them to have their walls studded with minute fatty granules. Some of the vessels are universally thus degenerated; others only in patches; while others are quite free from all abnormal sign, being perfectly white and semi-translucent. Some fatty granular corpuscles were mingled with varicose nerve tubes, with large fat corpuscles, and with a few red amorphous masses. There is much frothy mucus in the bronchial tubes. All the cavities of the heart are empty. The liver is small and congested. The kidneys are lobulated and congested, their capsules, especially that of the left, being thickened. There are no other notable changes.

Dr. Handfield Jones gave the following description of the microscopic appearances observed by him in certain portions of the softened tissue. In the convolutions of the hemispheres there were spots or patches of a red colour, portions of which under the microscope showed extreme congestion everywhere of the capillary plexus, and apparently small extravasations at various points. In the tissue around there were very numerous granule cells of different sizes, and some large patches of the oily-looking matter which enters so largely into the constitution of the granule cell; here and there the larger vessels (not so much the capillaries) were coated with the same matter.

Dr. Sieveking exhibited some beautiful drawings of the affected cerebral arteries.

Dr. Quain asked Dr. Sibson, whether he considered that the softening of the brain depended on disease of the vessels, or was the result of inflammation; if he thought the latter was the case, what were the grounds on which he came to that conclusion?

Dr. Sibson had no doubt the case was one of inflammation, from whatever cause it might originate. Many of the vessels were perfectly healthy; the disease was not due to the general condition of the blood-vessels, but those in the parts where softening had taken place, partook of the disease, and were in a state of fatty degeneration. By keeping to the use of the term "red softening," all difficulty was avoided. With respect to the symptoms:—the right side of the head and face was more congested, and the carotid beat more violently on that side than on the other, with other signs indicative of determination of blood to the head. He (Dr. Sibson) was not able to speak decidedly of the state of the blood-vessels at the base of the brain, but they seemed to be perfectly healthy. The structure of the brain itself appeared to be healthy, but the grey part was everywhere darker than usual, the white texture being apparently normal. The membranes were evidently thinner than they are generally found to be, and somewhat more congested.

Dr. Handfield Jones said, that the question of inflammation was set at rest by the presence of the granular cells. Dr. Bennett, of Edinburgh, has shown that they are not found in cases of non-inflammatory softening of the brain, and only in those where the *ramillossement* is owing to inflammation.

Dr. Quain presented, for Dr. Meryon, a specimen of

PERFORATION OF THE INTESTINE IN A CASE OF TYPHOID FEVER.

Two cases of typhoid fever (with rose spots) had occurred in the house in which the child, aged 5½ years, from which this specimen was taken, resided. The little patient, a girl, had been ailing for a week or more, when Mr. Wright, of Brixton, saw her. Her symptoms were—heat and dryness of the skin, dryness of the lips, white furring of the tongue, great thirst, slight headache, much vertigo, pulse 110 to 120, urine high coloured, three or four yellowish or brownish motions daily, no pain of the abdomen, on which there were five or six rose-spots. She had slight cough, with a little sonorous and mucous râle over a part of the chest. During the second week she had increase of diarrhœa, and some delirium at night. On the 13th of December, Mr. Wright was called up at night in consequence of the patient being seized with a sudden increase of pain in the hypogastric region. She had had within the previous hour four copious yellow liquid stools, accompanied by griping and general pain over the abdomen. There was no marked tenderness on pressure over the abdomen. Chalk mixture with tincture of opium gave temporary relief; but the marked alteration of the countenance, and the increased rapidity of the pulse, led to an apprehension that perforation had taken place, though there was no tenderness on pressure. At 10 next morning, she complained, in addition, of occasional shooting pains in the region of the bladder. At 8 p.m., there was collapse of the features, exquisite tenderness of the abdomen, especially in the hypogastric region, rapid pulse, vomiting, and diarrhœa, which continued until within an hour of death, which occurred at 7 o'clock on the following morning,—that is, twenty-nine hours after the sudden accession of pain, and on the thirteenth day of decided fever.

Post-mortem.—General peritonitis, with effusion of lymph in the abdominal cavity. Ulceration of several of Peyer's patches. In one of these, about four inches from the cœcum, perforation had taken place; but little of the contents of the intestine had escaped through this opening.

At the close of the meeting, the President nominated Dr. James Bird and Mr. Mitchell Henry as auditors of accounts, and the nomination was ratified by the members present.

MEDICAL NEWS.

University of Oxford.—The deputy-reader in geology (Mr. H. E. Strickland, M.A., Oriel) commenced a course of lectures on the 27th inst., at 1 p.m., at the Geological Museum in the Clarendon. These lectures will treat of the first principles of geology, illustrated by the chronological succession of the stratified deposits from the earliest ages to the present time. The Regius Professor of Botany, Dr. Daubeny, will begin his course at the new lecture-room, contiguous to the Botanic Garden, on the 5th of May, at 2 p.m. The lectures will be continued twice a week (Wednesday and Friday).

University of Cambridge.—Medicine.—The examinations for the licence *ad practicandum in medicinâ* will commence on the

24th May, at 10 a.m, at the Arts' School, under the Public Library, and will continue on that and the three following days. Candidates for the degree of Bachelor of Physic will be examined, at the same time, by the Regius Professor of Physic, the Professor of Anatomy, and the Downing Professor of Medicine. Gentlemen intending to offer themselves for examination are requested to signify the same to the Regius Professor of Physic, on pathology, on or before the 17th May. The lectures by the Regius Professor of Physic will recommence on the 21st of April.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 23rd inst.:—

Barnard, George, Bath.
Brand, Samuel Elwin, Aldersgate-street.
Day, Robert Newcombe, Chudleigh, Devon.
Dodwell, William Henry, Hammersmith.
Gane, Henry James, Bath.
Gange, Frederick Abner, Dover.
Gramshaw, Joseph John Hill, Bristol.
Heelis, Robert, Limehouse.
Hoare, Francis Legerson, Cahersiveen, Kerry.
Masfen, William Edward, Stafford.
Mercer, Thomas Hopkins, Alderley, Gloucestershire.
Pearse, Robert Bryant, Bath.
White, Nicholas Warburton, Macroom, Co. Cork.
Wills, John, Donhead, St. Andrews, Wilts.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 22, 1852:—

Adams, Edward Burman, Bungay, Suffolk.
Armstrong, Henry Baker, Brecon, South Wales.
Attfield, George.
Cumning, Robert Butterfield.
Duncan, William, Amble, Northumberland.
Godfrey, Benjamin, Grosvenor-place, Camberwell.
Smith, Louis Lawrence.
Tickell, John Hender.

Marischal College and University, Aberdeen.—Prizes in Medical Classes.—*Practice of Medicine.*—Senior class. John P. Stratton, Perthshire, Eglinton Prize. Junior Class. Edward W. Skues, Aberdeen, ditto. *Institutes of Medicine Class.*—George S. Ogg, Aberdeen, Eglinton Prize; Walter S. Gervis, Devonshire. *Medical Jurisprudence Class.*—Edward W. Skues, Aberdeen, Eglinton Prize. *Midwifery Class.*—Edward W. Skues, Aberdeen, Eglinton Medal; George Baillie, Edinburgh, ditto; John P. Stratton, Perthshire, Class Medal. *Surgery Class.*—John P. Stratton, Perthshire, Eglinton Medal; Francis N. Lucas, Calcutta; John Ogilvy, Aberdeen. *Anatomy*—Senior Class.—George S. Ogg, Aberdeen, Eglinton Medal; Francis N. Lucas, Calcutta, Honorary Certificate; Alexander M. Humphrey, Aberdeen, ditto. *Anatomy*—Junior Class.—Walter S. Gervis, Devonshire, Eglinton Medal; Paul H. M'Gillivray, Aberdeen, Honorary Certificate; George G. M. Millar, Aboyne, ditto. For good conduct, awarded by the Class, Henry T. Sylvester, South Wales. *Chemistry Class.*—William Walker, Aberdeen, Eglinton Prize; Thomas F. Peppe, Aberdeen; George S. Ogg, Aberdeen; Hugh R. Meiklejohn, Strathdon. On the 13th and 14th April, the following students underwent and passed part of their examinations for Medical Degrees, viz.:—Francis N. Lucas, Calcutta; Henry T. Sylvester, South Wales; John Ogilvy, Aberdeen; Walter S. Gervis, Devonshire; William B. L. Grant, Aberdeen; William Watson, Aberdeen. On Friday, the 16th inst., after the usual examinations on preceding days, the degree of Bachelor of Medicine was conferred on Alfred W. K. Packman, Hertfordshire; Charles D. F. Phillips, Edinburgh; Edward W. Skues, Aberdeen; George Baillie, Edinburgh; John P. Stratton, Perthshire; William M. Dickinson, Devonshire; William Stewart, Perthshire. And the degree of Doctor of Medicine was conferred on Alexander Wilson, Dumfriesshire; Archibald F. Richmond, Renfrewshire; Archibald Simpson, A.M., Aberdeen; David Johnston, A.M., Kincardineshire; George H. Smith, Edinburgh; James Laing, Perthshire; Samuel B. Denton, Yorkshire. For the situation of Assistant-surgeon in the Honourable the East India Company's Service, offered by the Chairman of the Company, there appeared two candidates—Archibald Simpson, A.M. and M.D., Aberdeen, and John Proudfoot Stratton, M.B., Perthshire. The competition was concluded on Saturday, the 17th inst., and on Monday, the 19th, the Examiners in the several departments of Medical Science, nine in number, having given in their report, both candidates were unanimously found to be highly qualified for the situation referred to, but Dr. Stratton to be, upon the whole, the superior. It was accordingly resolved to recommend him to the Chairman of the Honourable Company.

Medical Appointments and Vacancies.—The surgeoncy to the Exeter Dispensary is vacant, through the resignation of Mr. Amory. Messrs. Caird and Roberts, of Southernhay, Mr. Roper, and Mr. Hartnell are candidates for the vacant appointment.—At the Middlesex County Lunatic Asylum, at Colney Hatch, a resident medical officer is required for the female department. He must be an M.D., fellow or licentiate of one of the British Colleges of Physicians, or a member or Fellow of the Royal College of Surgeons, and L.S.A. Salary, 200*l.* a-year, with board, and an allowance for coals and candles. Services to commence in the middle of June next. Testimonials to be sent in on or before the 17th of May; date of election, the 18th.

Military Appointments. — 33rd Foot: Assistant-Staff Surgeon Alexander Mackay Macbeth to be assistant-surgeon, vice Webster, who retires.

Naval Appointments.—Mr. W. H. Clarke, assistant-surgeon of the Centaur, flag-ship of the Rear-Admiral Henderson, in the River Plate, is appointed to the Locust, vice Mr. Patrick, who was to leave the Brazil station in the first vessel for England.

India.—Assistant-Surgeon Swift, of the 98th, is destined for the Bengal Presidency. Second Class: Staff-Surgeon Burton, of the Garrison Hospital, Chatham, has accompanied a portion of the 20th regiment, *en route* for Canada.

Obituary.—On the 7th February, Dr. William G. Nelson died at his residence in Cambridge, New York, aged forty-three years. His disease was congestion of the brain. His illness was of short duration, and the intelligence of his decease fell with startling suddenness upon the large circle of his friends. He was born at Ryegate, Caledonia County, Vermont, in March, 1808. His medical education was obtained at Dartmouth College, where he stood high in the estimation of the professors. Dr. Massey, the Professor of Surgery and Anatomy in proof of this, appointed him first Demonstrator of Anatomy, and afterwards Professor of Surgery. Dr. Nelson afterwards attended lectures at Harvard University. He also spent some time as surgeon to Chelsea Hospital in Boston, where he devoted himself with much zeal to the acquirement of that knowledge and skill for which he became afterwards so eminent. On giving up his appointment at that hospital, he settled in Barnet, Vermont, where he remained until 1845, when he removed to Cambridge. In both places he enjoyed a large practice, and obtained a wide-spread popularity, both as a physician and as a surgeon. On the 7th inst., John B. Chamberlin, M.D., at St. Clair, Michigan, U.S., aged 75. Dr. Chamberlin, after the completion of his classical and medical education, practised successfully for many years in the district of Quebec, Lower Canada. At the breaking out of the war in 1812, refusing the allegiance required of him by the British Government, (he was a native-born American, U. S.,) he abandoned the position he had obtained in Canada, and, returning to the United States, established himself at Auburn, New York. In 1816, removing from Auburn, he became a resident of Michigan; and first at Detroit, subsequently at Mount Clemens and Pontiac, through many years, by skilful professional labour, made himself widely, as well as honourably known to the pioneers of the Peninsula. The *Detroit Advertiser* says of him, "The native vigour of his intellect was aided by a constant spirit of observation and inquiry; and a remarkable power of expression rendered his conversation always impressive to the minds of others." On the 14th inst., Dr. Henry Davies, for many years President of Hamilton College, died at Clinton, Oneida county, aged 51. On the 24th inst., at Aldermaston, Berks, Francis Cox, Esq., surgeon, in the 54th year of his age. At Guernsey, on the 9th inst., Francis P. Hutchinson, Esq., late Surgeon in the Royal Artillery, aged 68.

Royal Medical and Chirurgical Society.—At the last meeting of the Society, Dr. John Hall Davis, Dr. Robert James Hale, Dr. Walter Hayle Walshe, and Mr. Merryweather, were elected Fellows.

Medical Benevolent College.—We are happy to state, that a sermon was preached by the Right Rev. the Lord Bishop of St. Asaph, on Sunday last, in the church of the Holy Trinity, Brompton, in aid of the funds of the Medical Benevolent College, and that the proceeds resulting therefrom were highly satisfactory. We have also pleasure in adding, that the claims of the Medical Profession upon the public, in connexion with this important charity, are now being felt and properly responded to, and that those whose circumstances render them cognizant of the gratuitous services and private charity of the Profession readily avail themselves, through the medium of this excellent Institution, to testify their appreciation of the services alluded to.

ORIGINAL LECTURES.

CLINICAL LECTURE

GIVEN AT

St. George's Hospital,

By H. BENCE JONES, M.D., F.R.S.

Physician to St. George's Hospital.

BRIGHT'S DISEASE.

Gentlemen,—There are at present two cases of Bright's disease in the hospital to which I wish to-day, at the conclusion of my course, to direct your attention.

The points to which I shall chiefly advert on this occasion are, first, the relation of the microscopical sediment which exists in the urine, to the duration and intensity of the symptoms during life, and to the morbid appearances likely to be found in the kidney after death; secondly, the complications which exist in these cases and in the disease generally; thirdly, the treatment of the general symptoms and of the complications of the disease.

First, then, of the indications to be derived from the microscopical examination of the urine. I pass over the chemical examination and other points of interest, only in order that I may have more time for the special objects of this lecture.

In the *Medical Gazette* for June 13, 1845, page 270, you will find a short paper of mine, giving an account of the history of a peculiar microscopic deposit in albuminous urine, first observed by Professor Schönlein, of Berlin. There is an engraving also of the same kind of deposit, as it appeared in a patient with Bright's disease in this hospital in May, 1844. The account of the microscopical deposit is thus given by the late Dr. Simon, in his Beiträge:—

"The following different appearances may be recognised:

"1. Mucous globules of the ordinary size. Partly granulated. Partly clear. Nucleus very distinct.

"2. Laminar epithelium from the mucous membrane of the bladder.

"3. Blood-globules.

"4. Round dark globules filled with granular substance, in diameter varying from $\frac{1}{1000}$th of an inch to $\frac{1}{1111}$th of an inch.

"5. Tubes or amorphous matter adhering in the form of tubes. These tubes for the most part have an actual covering, and are cylindrical, as may be seen by causing them to revolve in the urine. Sometimes this covering is wanting, and then an amorphous slightly granular matter, adhering like a cylinder, is seen. The true cylinders are sometimes quite full, sometimes empty. The cylinders which are full contain sometimes a light, at other times a dark granular matter. The breadth of the cylinders varies; the broadest are $\frac{1}{500}$th of an inch, the narrowest $\frac{1}{1000}$th of an inch."

In the same paper, I have stated, that I found these cylinders in the slightly albuminous urine of a comparatively healthy man, who was passing oxalate of lime.(a) I remark on this, "that I cannot consider it probable, that irritation caused by oxalate of lime in the urine leads to the effusion of fibrin and albumen from the parietes of the urinary ducts. Nor can I agree with my friend Dr. Scherer, that these cylinders are analogous to the fibrinous coagula in croup, and that they result from inflammation of the ducts. It seems to me most probable, that congestion causes the effusion of the liquor sanguinis into the urinary ducts; that thus fibrin as well as albumen are effused together, and that the fibrin coagulating in the ducts produces the cylinders and the granular matter within them."

"Further experience," I conclude, "may show, that simple congestion alone, without granular disease, is indicated by these cylinders; but at present, from their invariable appearance in Bright's disease, I should, when I met with them in the urine, always suspect that granular degeneration of the kidney was taking place."(b) No good attempt was made to connect the appearances in the urine with the state of the symptoms or with the supposed stage of the disease of the kidney. It is self-evident, that if such a connexion can be proved to exist, it will be an advance of our knowledge, which, for prognosis, if not for the treatment of the disease, would be most desirable.

To establish this relationship between the deposit and the disease was and is worthy of every endeavour. To Dr. George Johnson the credit is due for first attempting the solution of the problem in this country; and, even if he did not succeed, yet an unsuccessful arrangement is better than no arrangement at all. His first statement was, that the microscopic appearance of oil-globules, partly free and partly contained in epithelial cells which have escaped from the urinary tubes, is the most important evidence of that fatty degeneration of the kidney which constitutes Bright's disease. This simple view, that Bright's disease consisted in fatty degeneration of the kidney, and that the appearance of microscopic fat and oil in the urine was diagnostic of Bright's disease, was soon rejected, even by Dr. Johnson himself. He then stated, that there were two distinct forms of fatty degeneration, and that there were other kinds of degeneration, consequent upon inflammation, which were characterised by increased number of slightly altered epithelial cells in the urine. He extended his first view thus:

"I have now distinguished four conditions of the kidney—

"1. Acute desquamative nephritis.

"2. Chronic desquamative nephritis.

"3. Simple fatty degeneration.

"4. Fatty degeneration with desquamative nephritis."

In the same paper, he also states that the kidney is liable to other diseases of an inflammatory nature. In one class of cases, pus has been chiefly present in the urine and in the kidney; in another and a distinct class of cases, blood. "The diagnosis of each of these conditions of the kidney may be made with ease and certainty by a microscopic examination of the urine."

Here, then, by the microscopic examination of the urine, it is thought that six or seven different forms of disease of the kidney can be recognised; and as it is in the highest degree probable, that if there be different forms of disease there may be different symptoms and different modes of treatment, it becomes very important to know how far the separation and classification of the forms of disease and of the sediments is true.

Now, the first and most important objection to the view above given is, that the microscopic sediment in the same case, during the progress of the disease at different periods, is found to vary exceedingly. Even the variations of the appearance of the urine and of the quantity of albumen, as determined by chemical analysis, are very considerable in the same case at different times; and so also the microscopic sediment varies considerably in the same case. Sometimes blood, sometimes pus, sometimes tubular casts, with epithelium in varying quantities; sometimes all microscopic sediment is absolutely wanting, so that, after the most careful endeavour to collect the sediment (if any were present), I have altogether and entirely failed to detect any microscopical evidence whatever, although the chemical evidence has been decided enough. At other times, microscopical appearances have easily been discovered, but they have been so variable, that at one time I might have called the case one of acute desquamative nephritis, and at another time fatty degeneration.

This primary objection has occurred to others as well as to me, and I cannot, therefore, agree in the statement, that the microscopic examination of the urinary deposit enables us to decide on the presence of different kinds of degeneration of the kidneys. On the contrary, it appears to my observation, and to my reason, far more probable, that in Bright's disease there is but one degeneration of the kidney, and that different states of congestion and inflammation give rise to the different microscopical appearances of the urine.

Take, for example, the phenomena observed after irritation of the skin, or inflammation of the pleura. First, congestion, without effusion or deposit; then, when the irritation is rather more, the congestion increases, and a watery blister or effusion forms, which may contain no trace of fibrin. If this fluid passed off, mixed with the urine, we should find that the urine was albuminous, without any trace of fibrinous casts or granular deposit. Suppose the congestion to be still more, the blister or the pleura then

(a) Though seven years have nearly passed since this observation was made, no further symptoms of any complaint have manifested themselves.

(b) I have known albumen and fibrinous casts to occur in the urine during pregnancy, with no other bad symptoms whatever. After delivery both disappeared from the urine, and five years afterward the woman was in good health. On the other hand, dropsy commencing during pregnancy, has many times, to my knowledge, been the commencement of Bright's disease, which has ended fatally.

would contain, not only albumen, but fibrin also. The liquor sanguinis, which consists of fibrin dissolved in the albumen, would be poured out.(a) If this occurred in the kidney, instead of in the skin or pleura. fibrinous casts would appear in quantity proportioned to the extent of the congestion, and the duration of this deposit of fibrin and albumen would depend on the duration of the congestion. Still greater congestion, or a more violent attack, would lead to the effusion of blood globules; and, when a further stage of inflammation supervened, pus globules would be found, in addition to the fibrin and albumen. Obstruction is the consequence of congestion and inflammation, and, from whatever cause the obstruction may arise, it causes fatty matter to accumulate ; and thus the deposit of fatty matter frequently, if not always, is the consequence, and not the cause, of the degeneration.

Let me. for a moment, take you to another disease of the kidney, (differing from Bright's disease,) in which I am certain that a greater or less degree of congestion does produce different deposits in the urine. In this complaint, I am certain, if you subdivided the disease according to the appearances in the urine, you would greatly err.

In the so-called chylous urine, occasionally, for many days, no blood globules, no trace of fibrin, no fat even, may appear; but chemical re-agents may show that albumen is present, and that the quantity of albumen in the urine is increased after exertion.

In the same case, at a different period of the disease, in addition to the albumen, fibrin will be present in the urine. It may be to so great an amount, that the bladder will be full of coagulum; and, at another time, to so small an amount, that only after the urine has been made for an hour or more will a fine coagulum be seen to form. If still more congestion of the kidney is present, blood globules in considerable quantity will appear, and their different deposits will alternate or be simultaneous, according as the congestion varies. It appears to me to be very probable, that in this so-called chylous urine the mammary processes of the kidney may be the seat of the congestion; while, in Bright's disease, it is more probable, from the deposit in the cortical structure, and from the appearances seen when the kidney is injected, that the secreting structure is the congested part.

I cannot, then, at present admit, that there are different diseases confused together under the denomination of Bright's disease ; but I consider that the different appearances in the urine and the different appearances in the kidney arise from the same disease in different stages and states; sometimes in an early stage, at other times in a far advanced stage. Now, in one stage, in a state of the slightest possible congestion or inflammation ; then, in the same stage, in a state of such congestion or inflammation that extravasated blood or purulent matter may be found mixed with the degenerated structure.

If you ask, first, in what does this degeneration consist? and, secondly, where is it seated? I am unable at present to give you a perfectly satisfactory answer. To the first question I reply, in chronic inflammation ; and to the second, in the capillary vessels which surround the tubes. In other words, I consider that Bright's disease corresponds to chronic pneumonia, and not to chronic bronchitis. Even in the state of inflammation which follows scarlet fever, I cannot consider that there is an affection of the urinary tubes consequent on the desquamation resulting from the removal of the poison of scarlet fever by the kidneys. I cannot consider that the elimination of an unknown poison is the cause of this or of other affections which at the end of scarlet fever are apt to arise—for example: inflammations of the eye and the ear. If the blood is in a state of increased fibrin, even when the blood globules are diminished, inflammation will most readily arise, and the slightest cause that produces a congestion here or there commences a local inflammation.

In the few cases in which I have seen the commencement of Bright's disease, there has been a preceding state in which inflammation was most liable to supervene.

Three such cases I have now before me. The first was a young man, who, when in perfect health, was attacked with pleurisy, which ended in empyema. He was tapped, and after many months, albumen, which was previously absent in the urine, appeared in small quantity, and rapidly increased, dropsy supervened, and the patient quickly died.

The second case was that of a young man with phtbisis. No trace of albumen was perceptible in the urine for some months after the phthisical symptoms appeared. The albuminous urine came on six weeks before his death.

The third case was that of a young woman with great disease of the mitral valve and hypertrophy of the heart. She had some obscure head symptoms, for which the urine was examined, but no albumen could be found by me or by others. Some months afterwards I was again called to the same patient. I found the urine highly albuminous. The head symptoms had changed into fits,—into epileptic seizures with tendency to coma, in one of which the patient died.

In all these cases that state of blood existed which, as I have so often told you, precedes and predisposes to inflammatory attacks.

You must not suppose, that because I think that there are not different diseases confused in the term Bright's disease, that, therefore, I recognise only one disease of the kidney. The kidney is without doubt liable to many kinds of disease. I have spoken of one which leads to the so-called chylous urine. There is another which ends in the formation of cysts, the wrongly called hydatids of the kidney, which is totally different from Bright's disease.(a) Then there is an infiltration of fibrin into the cortical structure of the kidney, similar to that infiltration which frequently occurs in the spleen, when there is a deposit of fibrin on the valves of the heart. Then there is the scrofulous disease of the kidney, a form of disease which may occur with Bright's disease, as tubercles in the lungs may be accompanied by pneumonia. Then there is the disease of the mucous membrane of the pelvis of the kidney and of the tubes (corresponding to bronchitis), which frequently results from dilatation and inflammation consequent upon obstruction of the urethra or ureter. Then there are malignant diseases. I mention these only to show you that there are many distinct diseases; and I may here remark, that the detection of the chemical and microscopical characters of the urine which is passed when these diseases exist in the kidney, is of more importance for prognosis and treatment than the determination of the different states and stages of Bright's disease.

2ndly. I must pass on now to the complications which exist in the two cases in the house and in the disease generally.

In the one case there is only chronic rheumatism of the joints. In the other there has been pericarditis, pleurisy, epistaxis, and at times most urgent vomiting and diarrhœa.

Though serous inflammations are most common, still, not unfrequently, inflammations of mucous membrane are met with complicating Bright's disease. I know scarcely any disease that I have not seen as a complication of Bright's disease. I do not say related as cause and effect. That relation would be most difficult to determine with certainty. In some of the rarer complications it would be quite impossible to do so. Thus, not many weeks since, you might have observed in the house a case of mania; the same patient had dropsy and albuminous urine. The same complication I have again seen, very lately, in the case of a lady who for three years has been known to pass albuminous urine, and now violent manial symptoms have come on.

In other complications the connexion may be fairly established. Take, for example, the head symptoms, which arise from the constituents of the urine not being thrown out of the blood. This complication is the most frequent, the most interesting, and the most dangerous which can occur. Urinary poisoning, it may be called, for shortness. You have often, probably, heard it said, that urea in the blood caused the symptoms of poisoning; but there is good reason for doubting whether urea is the only, or indeed the chief poison.

In the first place, it has been observed, that frequently a very great excess of urea has been found in the blood, and yet no poisonous symptoms have been present. Secondly

(a) Thus, lately, in St. George's Hospital, a patient of mine, with pleurisy and effusion, was tapped, and a clear, greenish coloured liquid ran through the canula. The following morning, on taking the liquid for closer examination, the whole liquid was found to be coagulated. By agitation, the coagulum was easily broken up. The fluid was alkaline, highly albuminous specific gravity 1020, free from pus globules; the amount of fibrin was small, though it was sufficient to coagulate all the liquid.

(a) I am indebted to Dr. Beith, R.N., for the fact, that very many of the Greenwich pensioners, who each winter die from pneumonia or bronchitis, are found to have these cysts in the kidney. Most commonly no disease of the urinary organs has been known or thought of during life, very many being in good health up to the time of the commencement of the inflammation of the lungs.

The following experiment has been made by Dr. Frerichs:—"In the afternoon, the kidneys of a dog were extirpated. The following day it appeared perfectly well. Twenty-four hours after the operation, 31 grains of urea were injected into the jugular vein. In an hour the dog was restless, and vomited frequently; soon after, convulsions came on. The vomited matter contained ammonia, and in two hours and a quarter the dog died. The blood contained ammonia.

A second experiment is thus described:—At a quarter past three, both kidneys were extirpated, and then 46 grains of urea was injected into the jugular vein. At half-past four the dog became comatose, and the expired air gave thick fumes when hydrochloric acid was brought near to the nose. At six o'clock ammonia could not be detected in the expired air; the dog again became lively and got up. The following morning it was found dead.

Another dog had only 31 grains of urea injected after extirpation. Two hours and a half afterwards no ammoniacal vapours were expired, and the dog showed no symptoms of poisoning. The following morning it was found dead.

Three other dogs had 46 grains of urea injected. In all of them ammoniacal vapours were found when the symptoms of poisoning occurred.

Dr. Frerichs also made the following comparative experiments, by injecting carbonate of ammonia into the jugular vein:—

A filtered solution, containing from 15 to 30 grains of carbonate of ammonia was used. The injection took place very slowly. The dog howled and fell into a state of deep stupor, with occasional convulsions. The breathing was difficult, and the expired air was loaded with ammonia. The coma lasted three hours, during which time vomiting occurred twice. Afterwards the dog became again lively.

Another smaller dog was immediately seized with violent convulsions, which lasted three minutes; then it vomited and became comatose. The following morning the dog was as well as ever.

Three other dogs had immediate convulsions; after two or three minutes they became comatose. When more carbonate of ammonia was injected fresh convulsions ensued; these were again followed by coma. After many hours the dogs recovered.

From these and other experiments made at Göttingen, Dr. Frerichs arrived at the conclusion, that urea must not only be present in the blood, but that some agent must also cause the urea to change into carbonate of ammonia.

$$C^2\,N_2\,H_4\,O_2 + 4HO = C_2\,O_4 + N_2\,H_8\,O_2 = 2(CO^2 + NH^4\,O)$$

In confirmation of his theory, he states, that ammoniacal vapours are constantly exhaled by those who have head symptoms with Bright's disease.

He gives the following Table, to show how frequently death ensues from this complication:—

Total Number of Deaths in Bright's Disease.	Observer.	Number of Deaths from Urinary Poisoning.
70	Bright	27
10	Bright and Barlow	2
36	Gregory	17
16	Christison	10
49	Rayer	3
6	Martin Solon	2
33	Malmsten (Sweden)	20
21	Frerichs	5
241		86

To which I may add, from eighty-two cases of Bright's disease which have been under my care in St. George's Hospital, from the 22nd of April, 1846, to the 31st of December, 1851, the deaths were thirty-six, and, of these, thirteen died with head symptoms.

Whether the urinary poison is carbonate of ammonia, and nothing else, I cannot certainly say. It appears to me most probable that other substances, far more poisonous than carbonate of ammonia, may be produced in the blood in consequence of the insufficient action of the kidneys; and I can well believe that oxalic acid or carbonic oxide might accumulate in the blood instead of carbonic acid; but I have as yet no proof to offer you of the presence of these substances in the blood when the head symptoms occur. Meanwhile, the ammonia theory may be tested by the examination of the expired air in this and other diseases, and possibly also by the presence of nitrous acid in the urine. Hitherto, in cases of Bright's disease, without head symptoms, I have been unable to find nitrous acid in the urine, although when 40 grains of urea are taken by a healthy man, nitrous acid is easily found to be present in the urine.

3rdly. The time warns me to pass on now to the treatment of the complications and of the general symptoms.

The case of chronic rheumatism calls for no particular remarks. With regard to the treatment of the pericarditis and pleurisy, the special point to which I desire to direct your attention is, that no mercurial has been ordered.

The intense action of mercury in Bright's disease has so frequently and so forcibly been presented to my notice, that I have formed a general rule never to give mercury in cases of albuminous urine. I have seen the most violent salivation from single doses even of grey powder, and on this account, even in serous inflammations consequent on Bright's disease, I advise you not to give mercury. Why mercury should act so energetically in this disease is probably explained by the altered state of the kidney. In health, most probably, mercury no sooner passes into the system, than it begins to pass out again by the kidney, like hydriodate of potash or the salts of iron. For example, if a single grain of hydriodate of potash is taken in an ounce of distilled water, in twelve minutes it can be detected passing off in the urine; but, if the kidney is diseased, then most probably this rapid excretion does not so easily take place, and the intensity of the action of this and other medicines may thus be greatly increased.

But, if mercury cannot be used, how is the inflammation to be treated?

The efficacy of counter-irritation is very decided in the treatment of these secondary inflammations. Thus, you will see that blisters form the chief treatment, and the inflammation of the pericardium quickly, and of the pleura more slowly, yielded to this application. But many days had not elapsed when a fresh complication presented itself: violent epistaxis occurred. This yielded to the application of cold, and to gallic acid in ten grain doses, and for a few days no fresh symptoms appeared; but then vomiting ensued, and of all the complications this is one of the most unfavourable, as it usually indicates the commencement of urinary poisoning. It may, however, be also caused by inflammation of the stomach, and in the case before you it probably arises from this cause: at least it has yielded to remedies given on this supposition, and it has been followed by symptoms of inflammation of the colon, of which I shall speak in a few moments. The vomiting was first treated with hydrocyanic acid, and then with creosote; one drop made into a pill with bread was the dose; but though generally this has proved effectual, it was not beneficial in this case. Milk and lime-water were given by teaspoonsful, but the vomiting continued. Small lumps of ice were then ordered, and the vomiting was considerably relieved. It, however, was not removed, but it yielded to a blister; and when it returned, a second blister was applied with great benefit. We come now to the latest complication. The bowels became very relaxed; blood in considerable quantity was passed in the motions; very severe pain was felt when pressure was made above the sigmoid flexure of the colon, while the tongue became more coated, and the pulse more small and hard. Injections of starch, with laudanum; suppositories of compound soap pill; counter-irritation over the painful part, will probably relieve this complication also; but meanwhile the strength decreases, and the increasing heaviness indicates that head symptoms will probably before long occur.

In the treatment of urinary poisoning, I know no single remedy which has produced an effect at all equal to that of a blister on the back of the neck. This appears to me to indicate that there is some local congestion of the brain, as well as some poison in the blood. I have as yet had no good opportunity for trying what the free administration of vegetable and mineral acids can do when head symptoms are present; in one case, large quantities of lemon-juice appeared to have a beneficial effect. The theory of Dr. Frerichs indicates the acid treatment, and it is worthy of a fair trial.

Dr. Watson is, without doubt, right in saying, that these head-symptoms may arise from insufficient supply of blood. Just, as in children, symptoms resembling hydrocephalus may arise from anæmia, when, instead of depletion, counter-irritation and stimulants are required. On this theory, no poison is considered to be present in the blood. The truth, probably, is, that too little blood, too much blood, and

poisoned blood,—each of these states, in different cases, is the cause of the head-symptoms in Bright's disease.

I have only a few minutes for the general treatment when no complication exists. As I cannot make any separation of Bright's disease into different diseases, so I am unable, from observation, to find that different kinds of treatment are desirable. The indications are, first, to relieve the congested kidney; and, secondly, to improve the general health. Gentle but decided action on the skin and bowels appear to me best to fulfil the first indication; cupping, vapour-bath, and elaterium, are the three most energetic remedies; cream of tartar, compound jalap powder, and abstinence from stimulants, are the milder agents. To improve the health, proper air, exercise, food, and small doses of iron, are essential.

Specific treatment by gallic and nitric acid has not benefited my patients in St. George's Hospital. In so-called chylous urine, I know well, the use of gallic acid, in doses of two drachms daily; but, in Bright's disease, when ten-grain doses were given, I have more than once known bad symptoms to occur. In one case, violent convulsions made their appearance soon after the gallic acid was taken. In no case have I found that it stopped the albumen from passing away. I may here mention, that tannic acid appears to affect the stomach much more than gallic acid does.

With regard to the treatment by nitric acid, which has been extensively tried in Germany, I have not found any good result, even when dilute nitric acid has been taken daily for many weeks.

As to the result of treatment, omitting the cases which follow scarlet fever, which constantly recover perfectly, temporary relief is generally all that is obtained. Life may be prolonged for years. Even with ascites, I have known a patient in and out of St. George's Hospital for ten years. Usually, although every complication may be removed, the albumen continues in the urine. The patient resumes his work, and considers that he is recovered; but heat and nitric acid show that this is not the case; and it is only by great care that the tendency to a return of the former symptoms, or to gout, can be prevented.

ORIGINAL COMMUNICATIONS.

THE MECHANISM OF BRONCHOPHONY.

By W. H. WALSHE, M.D.,
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§ I. The physical conditions in which morbid bronchophony is clinically observable are:—

1. Increased density of the pulmonary tissue either surrounding pervious bronchi, or forming a medium of communication between pervious bronchi and the spot of the thoracic surface examined,—whether that increase of density be caused by solid, semi-solid, or, perhaps, even liquid, infiltration of the parenchyma.

2. Increased density of texture, produced by extraneous pressure.

3. Presence of any solid extra-pulmonary formation in such a situation as to form a connecting link between the surface examined and a bronchus of some calibre.

4. Increased width and hypertrophy of the substance of the bronchial tubes.

5. Diminished density of the lung, as in the rarefaction of vesicular emphysema.

The diseases referable to the first head are the *common* causes of brochophony; but any hypothesis in explanation of the phenomenon must also apply to the other and comparatively *rare* causes.

§ II. Laennec regarded bronchophony as an essential dependence on increased density of the pulmonary texture, and supposed that it was simply produced by the greater facility with which comparatively dense homogeneous tissue —homogeneous from the exclusion of air—conducted the laryngeal vibrations to the surface.

This explanation is inadequate to meet all the circumstances of the case. In the first place, bronchophony *may* exist, and this to an intense degree, over lung rarefied to such a degree as to give actually almost tympanitic resonance under percussion. Of this fact, (not generally known, or, at least, taught,) I have observed a certain number of examples, where *post-mortem* examination left no doubt of the absence of any textural change in the lung except emphysema. In the second place, as was, I believe, first mentioned in print by Skoda, the voice resounds sometimes with greater intensity, when ausculted over the chest than over the larynx itself. In the third place, the pitch of the bronchophonic differs sometimes distinctly from that of the laryngeal voice. These facts, without disproving the correctness of Laennec's theory as far as it goes, show at least that it requires an addition of some kind to make it include all the varieties of the phenomenon.

§ III. Skoda, holding the general doctrine that the "varying conducting power of the healthy and diseased lung-substance cannot be taken as a basis of explanation of any of the phenomena of auscultation," specially opposes Laennec's views of the mechanism of bronchophony on the following grounds:—

(*a*) Bronchophony may in the course of a few minutes appear and disappear over hepatised lung, the other physical signs, especially the percussion-sound, having undergone no change. (*b*) When vocal resonance thus suddenly disappears, it may as suddenly be restored by making the patient cough or breathe deeply, so as to free the bronchi from fluid in the part of the organ ausculted. (*c*) In cases of pleuritic effusion, the resonance grows weaker and weaker in proportion as the fluid increases; now as the lung grows more and more solid, the greater the quantity of pleural fluid compressing it, the reverse ought to be observed, were Laennec's doctrine of solidification and improved conducting capability well founded. (*d*) If a healthy and hepatised lung be removed from the body, and if, while one person speaks through a stethoscope placed in contact with the surface of each organ successively, a second listens through another stethoscope placed at an opposite point of that surface, the listener will find that more intense resonance reaches the ear through the healthy than the diseased lung.

What is the force of these objections? Let us examine them *seriatim*. (*a* and *b*) Since I first became acquainted with Skoda's statement concerning the appearance and disappearance of bronchophony in hepatisation, I have repeatedly endeavoured to produce artificially the change he describes, but have invariably failed; I have questioned other physicians on the point, and find that they have not observed the alleged variableness in the vocal resonance. I have, however, in one or two instances, noticed intermittent bronchophony occurring spontaneously without the patient having expectorated or even coughed,—a peculiarity evidently of different mechanism from that insisted upon by Skoda, and one to which I will by-and-by return. (*c*) The argument derived from the phenomena of pleuritic effusion seems feeble, and, indeed, unsound. The interposition of a mass of fluid between the condensed lung and the surface alters the terms of the problem completely. It has been shown by Colladon and Sturm, that sonorous rays which reach the surface of water at a very acute angle do not pass into the air, but undergo reflection in the interior of the liquid. Now the angle at which the sonorous vibrations reach the fluid from the bronchi, and ultimately reach the outer surface of the pleural fluid, may very possibly often prove of the degree of acuteness fitted to prevent their passage into the air. At all events Skoda, by ignoring the new influences likely to be exercised by the fluid renders his argument valueless.(a) *d*. The results I have obtained from some experiments on the conducting powers of hepatised tissue, do not agree with those announced by Skoda. First: It is, I admit, quite true, that tissue, called hepatised, may conduct the voice no better, or even less forcibly, than a similar thickness of healthy parenchyma; but it is equally true, that this is not a constant result. I have occasionally found hepatised lungs, taken from the body, conduct the sound with extreme intensity. And these varying results may be obtained from different lungs, which the naked eye would judge to be in the *same* state physically, in regard of their shares of air, fluid, and semi-plastic substance: but it is evident, from the variations in result, that, acoustically, they are in *different* physical states; and that, therefore, such experiments as Skoda's are not to be trusted to. Specimens of parenchyma, apparently identical, are in reality widely different. There can, for example, be little doubt,

(a) Let it not be forgotten, too, that in the interscapular region strong bronchophony is sometimes audible, even where fluid is accumulated in large quantity in the pleural sac.

that varying homogeneousness plays a more important part, than any observable so-called solidification, in regulating the conducting power of the lung. In the varying homogeneousness of different specimens may, in truth, lie the key to the difficulty; but even if so, it is a key which cannot practically be used. Secondly: If, while one person speaks into a stethoscope with its narrow end introduced into the trachea, a second listens over a part of the chest where hepatised lung lies beneath (and where intense sniffling bronchophony existed during life), the listener will often be surprised at the singular and total absence of sound. Skoda, obliged to admit this fact, attempts to evade its force by supposing the vibrations to be interfered with by fluid in the bronchi. To this I would reply, that I have satisfied myself of the total absence of such *post-mortem* resonance over pneumonic solidification, in a case where the bronchi, to the third and fourth divisions, were peculiarly free from fluid, and scarcely any spumous liquid infiltrated the parenchyma—which very same parenchyma, removed from the body, conducted the voice from one stethoscope through another with striking intensity. If we consider the main difference in the physical conditions of the parts, when an individual himself speaks, or when another speaks into his trachea after his death, an obvious explanation of the experimental failures to imitate the bronchophony of life suggests itself. In the dead body, in truth, the laryngeal, tracheal, and bronchial walls take no part in the production or conduction of the sound, which is propagated by their contained air alone; whereas in life the walls of those tubes obviously conduct the sonorous vibrations. But to admit this would have been fatal to more than one of Skoda's hypotheses. Besides, hepatised and healthy lungs are not strictly comparable in and out of the body in regard of this matter: *within the body* the contact of a hepatised lung with the chest-wall is more perfect than of a healthy one; and, admitting that the former is a worse conductor in regard of the condition of its substance, it may be a much better one through the closeness of its union (especially if adhesive) with the parietes. Here is a point which has been totally overlooked by the Viennese physician and his followers.

§ IV. I conceive, then, that, whether Laennec's doctrine be true or false, the arguments just reviewed fail to prove it unsound. Skoda himself naturally thinks otherwise; and, excluding the walls of the trachea and bronchi from all share in the *conduction* of the sonorous vibrations of the chordæ vocales,(a) (an office assigned by him to the contained air of those tubes alone,) maintains that bronchophony is really produced by consonance of the air in the bronchial tubes with the laryngeal voice.

The hypothesis of consonance does not appear to me satisfactory; and it unquestionably fails to meet all the conditions of the problem. The reasons on which I ground this opinion are as follow:—(*a*) Air in any enclosed space does not consonate with every sound produced at its orifice, but only with the fundamental note of that space, and with certain others having a fixed harmonical relationship to that fundamental note,—with certain of its *concords*, in short. This is easily ascertained, in a rough way, by running the gamut with the voice at the mouth of an empty water-bottle; one note only of the octave is at all markedly reinforced by consonance within the cavity,—one or two others, (according to the distance from the orifice at which the vocal sound is emitted, and the depth of the mass of air within the bottle,) very slightly increased in loudness. Now, on the contrary, when bronchophony exists, it is audible with *successive notes* of the octave, standing in no harmonical relationship to each other,—absolute *discords*, in short. These successive notes are to be found at the lowest part of each register, (whether bass, tenor, or soprano;) but the force of bronchophony gradually decreases, not at harmonic intervals, but on *each successive note from below upwards*, until the resonance disappears altogether;(a) and obviously the limitation of bronchophony to grave tones, as contradistinguished to acute ones, has nothing to do with the principle of consonance, but depends upon the difference in the number of vibrations and breadth of the sonorous wave, when notes of these two classes are severally generated. (*b*) Bodies consonate only in unison, or in certain fixed harmony, with the original sound which throws them into vibration.(a) Now, the pitch of the bronchophonic voice varies irregularly from that of the laryngeal with which it co-exists. This difference of pitch is especially to be caught in cases of hepatisation, and is sometimes very striking in amount; the corresponding notes heard in the larynx and on the surfaces of the chest are then, very perceptibly, discords. (*c*) Skoda's exclusion of the tracheal and bronchial walls from all participation in the transmission of the laryngeal voice is at variance both with theory and experiment, and cannot for a moment be acceded to. (*d*) In cases where the bronchophonic voice is very positively and notably louder than the laryngeal, it is difficult to believe, from the mere fact of the intensity of the sound, that the phenomenon can be due to consonance. For a consonating sound, as a rule, is vastly more feeble than the primitive tone eliciting it; and the nicest adjustment of the quantity of air in the consonating body (presuming this to be hollow) is required, in order to produce any serious increase in the amount of intensity. Let it, however, be granted, *argumenti gratiâ*, that chance may sometimes cause the column of air between the larynx and the seat of bronchophony to be of the appropriate length to produce a marked increase of sound,—the doctrine of Skoda gains nothing by the concession. For, be it remembered, Skoda rejects conduction as an element of bronchophony,—bronchophonic voice is, in his apprehension, consonating voice; consonating voice is, then, under the above circumstances, by admission, louder than the original voice. Now, here is an idea irreconcilable with observation; for, it does not appear, that (provided the original and consonating sounds be produced by bodies of the same class, as vibrating strings, hollow bodies, solid plates, etc.) the consonating sound is ever louder than the original tone.(b) (*e*) If the excess of loudness of the bronchophonic over the laryngeal voice were from consonance, *vocal fremitus* (inasmuch as the walls of the consonating tubes must vibrate in the direct ratio of the vibration of their contained air) ought to rise and fall exactly as *vocal resonance*. Now, in point of fact, these two phenomena do not invariably maintain any direct relationship to each other; one may gain, while the other loses, in intensity.

These objections appear to me conclusive against the pure doctrine of consonance, as taught by Skoda, while they show that, if consonance plays any part in the production of bronchophony, it must be a subsidiary, rare, and accidental one. And even this concession is rather made on the ground, that the occurrence of consonance within the chest is not, *à priori*, impossible, than in deference to the arguments actually adduced in its favour.

§ V. From the discussion into which I have now entered, it would follow that the mechanism of bronchophony is probably complex, and certainly not, as the attempt is commonly made to prove it, invariably one and the same.

There are four points which appear especially worthy of consideration: the conduction of laryngeal voice; its possible increase of intensity within the chest; the distance at which that increase of intensity (if real) occurs from the part of the thoracic surface examined; and the relationship of pitch of the laryngeal and bronchophonic voices.

1st. In regard of conduction of laryngeal sound, theory would support the inference, that as the human voice is best propagated in air, the more the lungs were rarefied, the higher would their conducting power become; and, in accordance with this, it is certain that intense bronchophony is sometimes heard over highly emphysematous tissue. However, on the other hand, as the tracheal and bronchial walls themselves vibrate during speaking, any really solid ma-

(a) Skoda, of course, admits, that the bronchial walls, in the spot where consonance takes place, intensify the consonating tones of the air within them by their own vibration; but this is a very different thing from their taking part in the production of bronchophony by conducting the laryngeal voice.

(b) Curiously enough, the vocal *resonance* always ceases to be perceptible at a lower point of the scale than the vocal *fremitus:* this is another difference to add to numerous others distinguishing the properties of the two phenomena.

(a) The unison-note alone is distinct to ordinary ears: the consonating harmonics are so faint as to require the organ of a Costa for their detection.

(b) The case may be very different where vibrations are communicated from a body of one physical constitution to a consonating body of another class. Thus, where a tube takes up the vibrations of a solid disc, the consonating note of the tube may (by managing carefully the length of the vibrating column of air in the interior) be made incomparably more powerful than the original tone: the quality of such notes is exquisitely pure and full; and long ago Savart suggested the construction of a musical instrument on this principle, which, it seemed probable, would exceed in melody and power any of those in use. Civilised musicians have not profited by the philosopher's suggestion; yet the savages of some of the Pacific Islands, curiously enough, have hit upon rude contrivances illustrating the principle.

terial directly connecting a large bronchus with the surface of the chest, must conduct those vibrations forcibly; and, in accordance with this, we find that wherever solid fibrous structure is seated in the manner supposed, bronchophony of the most intense character is audible. But if the union of the solid material with the chest-wall be imperfect, if there be any interruption at the planes of union of the conducting materials, the acoustic conditions are completely changed, inasmuch as interruption at the union of media of different densities most deeply impairs the conducting faculty of the series. Here is one clue to the differences in vocal resonance, observed in cases where the physical conditions appear, on superficial view, identical; hence, too, we have no fair reason to expect that, in all samples of the variable semi-solid states comprised under the title of "hepatisation," conducting power should be affected in a uniform manner, and experiment shows that it actually is not. Experiment, in truth, alone can teach in each instance what the force of conduction really is in the various complicated conditions of physical change in the lungs.

2ndly. It is indubitable, that the bronchophonic voice is sometimes louder than that transmitted through the stethoscope directly from the larynx. The extreme rarity of this occurrence does not affect its reality; and hence, some explanation must be found for the increase of intensity within the thorax. We have seen the objections to Skoda's hypothesis of consonance. Now, there is another way in which the intensity of sounds may be augmented at a greater or less distance from their place of production—by reflection, and by reflections brought to a focus, or *echo*. But are the conditions of reflection fulfilled in the hepatized lung? It would appear so; for the tubes along which the voice is transmitted from the larynx are surrounded by semi-solid material, proper (when compared with healthy tissue) to reflect and concentrate the sound; while the air-cells and minute bronchi are closed to a variable distance, and prevent its divergence. The tubes resemble so many speaking-trumpets, and, just as in these instruments, the augmentation of sound is produced by reflection from their quivering walls; as this reflection tends to propagate vibrations (otherwise divergent) in the same direction, increased intensity of sound must be the result. And, further, if the reflected vibrations chance to be brought to a focus within a large tube, then *echo* will occur; and, as under ordinary circumstances, the echo may be materially louder than the original sound. But, it may be inquired, how, upon this theory, is the temporary disappearance of bronchophony, already referred to as a possible, though very rare occurrence, explicable? It is conceivable, that where such suspension occurs, this may sometimes depend on the deadening influence of accumulated fluid in the tubes. (a) It may also be sometimes traced to accidental pressure of a main tube by some extraneous body, which, from movements of the trunk, the act of coughing, &c., presses much or little, or not at all, upon that tube. (b) It seems extremely probable that, under the latter circumstances, bronchophony would, (I have not, however, verified this conjecture,) be heard at some point of the chest nearer the bifurcation of the trachea. Again, it is possible that certain changes of posture, altering the relationship of the reflecting surfaces, might interfere with the production of echo, by preventing the reflected sounds from coming to their usual focus. Besides, the position of the auscultator in respect of the focal point, might prevent him from hearing an echo really existing.(c) The force of the echo will also rise, the smoother the bronchial walls, and the larger the tubes in which it occurs. And numerous other circumstances may be conceived, but scarcely proved, to affect the phenomenon. Among these, the composition of the gases within the bronchi may, for aught that is known, hold an important place: hydrogen has been proved to deaden sound greatly; the effect of carbonic acid, mixed with other gases and aqueous vapour can only be ascertained from experiment.

Thirdly: As concerns the distance from the point of auscultation at which the reinforcement of sound within the thorax occurs: the further away, the less of the resonance will reach the surface; the amount, however, will be modified by the conducting property of the interposed media.

A little consideration will show that these three conditions of bronchophony,—conduction of laryngeal sound, increased intensity of this within the thorax, and proximity of site of the increase,—may or may not be directly as each other; one may be in a state favourable to, the rest unfavourable to, the formation of bronchophony. Hence the variable state of the sign in different cases of the same disease; and hence an additional clue, for example, to the inconstancy of bronchophony in pleuritic effusion.

Fourthly: The relationship of pitch of the bronchophonic and laryngeal voices seems the most difficult part of the subject,—difficult, at least, in those cases where a distinct difference can be detected in the pitch of the two. The consideration of this point is reserved for another occasion.

(a) The effect of carpeting or woollen cloth of any kind, in deadening the sound of music in an apartment is well known. The intermixture of air and solid fibres in the carpets, through which the sound has to pass, deadens the echo between the ceiling and floor, by which the original sound is swelled."—Herschel, art. "Sound," *Encyc. Metrop.* Aerated mucus and sanguineous serum in the bronchi would have the same effect on vocal echo in those tubes, as the carpeting under the circumstances referred to above.

(b) This cause is suggested from actual observation.

(c) The existing theory of echoes generally is inadequate to explain many of their phenomena. There is (or was) a ruined fortress near Louvain well illustrating this. Here, if a person sings, he only hears his own voice, without any repetition; those who stand at some distance hear the echo, but not the voice,—and they hear the echo with surprising variations,—sometimes louder, sometimes softer,—now near, now distant.—*Burrowes's Cyclop., Art. "Acoustics."*

DUMBNESS AFTER TYPHUS FEVER.

By WILLIAM FOLEY, M.D., M.R.C.S.

In the *Dublin Medical Press*, September 9, 1840, I published the particulars of an extraordinary "Case of Dumbness succeeding Typhus Fever," that at the time, and for a considerable period subsequently, excited a good deal of attention. It was copied into the *Medical Times* in the same month, and many of the continental journals.

The case was published not for any information it was calculated to convey, but as a question to physiologists and pathologists, What was the cause of dumbness; upon what lesion did it depend?

I am not aware that any explanation of the strange phenomenon has been given or attempted.

On looking to the report published in the *Medical Press*, I find it concludes with the following sentence:—

"I will not lose sight of this interesting case; and if the attempts to restore the lost faculty be successful, I will communicate all new particulars."

It is needless to go into the minutiæ of treatment, or to state the lively interest with which I watched its progress; suffice it to say, that years rolled on without the slightest improvement; so hopeless had it become, that I had quite forgotten it, until my attention was directed to it a short time since by a distinguished and philanthropic member of the Profession in Dublin, to whom I communicated all the particulars, and in whose able hands I hope soon to see a brilliant use made of it, that will throw an interesting light on pathological medicine.

During recent inquiries made about the case, I find that the patient continued completely dumb for the space of eight years, after which he and every member of his family were seized with typhus fever. Towards the termination of the disease he was observed to articulate one or two short words at different times. As convalescence progressed, pains were taken to teach him a few more, and by very slow degrees indeed, he was gradually brought on, so that now, at the end of three years, he can speak very distinctly, but at times so rapidly as to cause him great embarrassment.

The intensity of the disease must have been much less in the last attack than the former, as in the first he was quite unconscious nearly from the commencement; while in the latter, he has stated to me, that he never lost his recollection.

He has a perfect memory of every circumstance since his fever in 1839, was well aware of the privation under which he laboured, and therefore shunned intercourse with all except members of his own family. He understood very well the jeers and observations made by those thoughtless young persons among whom he was often obliged to be; galling as they were to his feelings, he had no way to defend himself, and could not convey that he comprehended every word as well as any of them.

I questioned him on different occurrences that took place since he had been my patient in 1839, and found that his

memory on, and acquaintance with, them was quite accurate; so that I have no doubt of the correctness of his comprehension during the eight years of his dumbness.

He told me, that since the original disease he felt a "weakness" in the right side of his body that never prevented his power of moving, but yet made him feel "uncomfortable;" that, as the power of speech returned, the "weakness" was diminishing, so that now he scarcely feels it.

I stated in the original Report, that he exhibited, during the fever, a very severe and well-marked paralysis of the right side, including every part from the eye to the toes; that on the nineteenth day it had nearly disappeared, and he was soon after able "to run about."

There seems to be no doubt that the leading feature was meningeal engorgement in the head, at all events, and probably continued into the spinal canal. I think it probable that striæ of that congestion remained at the base of the skull, compressing some of the filaments composing the roots of the glosso-pharyngeal portion of the eighth nerve; as also of the ninth on the same side.

That the organs of voice were not implicated, seems clear from the fact, that he could hum musical airs accurately and distinctly; his father often told me, during the first two or three years of his dumbness that "he could turn his tunes as well as ever he did."

A few months ago, I met what might be called a case of "dumbness after typhus fever," but not correctly, in the person of a boy about eight years old. He was attacked with fever at about the age of four years; he became very deaf as the disease drew to a close, and, as convalescence progressed, it increased until it acquired that degree of intensity that he could not hear a piece of artillery discharged within a foot of him.

His general health improved rapidly; he soon became quite well and strong. He continued for a time to speak as he was accustomed before his sickness, when he wanted anything, but gradually and rather quickly forgot most of his words, so that he has been for over three years accounted a "dummy" by his neighbours. He occasionally, but rarely, speaks—single words, and generally, of one syllable, as milk, bread, egg, turf,—when he sees objects whose names were very familar to him when he enjoyed all his faculties, but cannot remember words enough to express an idea.

The lesion, as well as the organs in fault, are quite different in this case from the former. In the former, the organs of hearing were not in the slightest degree impeded; the apparatus of speech alone was obstructed. In this, the parts subservient to speech were quite free, but the auditory apparatus was entirely useless; the lesion producing which may, in all likelihood, be meningeal congestion compressing the "portio-mollis" of both seventh nerves. It has been observed of him, that, as he became unable to communicate his feelings, he has grown exceedingly mischievous.

A very remarkable circumstance in the former case is, that dumbness caused by typhus fever, and of eight years' continuance, was cured by another attack of the same disease. If the subject of the second case should be equally fortunate, it would be a curious coincidence. If, in the meantime, the child would be taught to spell and read as deaf and dumb children are, I have no doubt, that instead of answering by signs as they do, he could reply in speech, as what appears to be dumbness in him, is simply unaccustomedness to conventional terms, the organs of speech retaining the power to utter them, if the memory were only stored with a supply.

Kilrush.

GANGRENOUS THECAL INFLAMMATION OF THE HAND FROM A BITE.

By ALFRED CARR, M.D.

John Gallagher, a night-watchman, applied to me with a contused wound of the finger. (The end had been bitten off in the course of a drunken brawl by his adversary, during the night of August 8, 1851). The wound was dressed, and he was directed to come again the following morning, when I proposed to amputate the finger immediately below the seat of injury. Not wishing to undergo the operation, he did not return, but placed himself under the care of an empiric. I lost sight of my patient until November 15. He had then been, for the last six weeks, an outpatient at the Manchester Royal Infirmary; but, being unable to leave his bed to attend at the Infirmary, he sent for me, and promised, if I would again take charge of him, to submit to any operation it might be deemed necessary to perform. I found him suffering from suppurative fever, with a feeble, quick, and irregular pulse; the hand bent at nearly a right angle with the wrist, and much swollen. Pressure being made upon the wrist, which was very tender, a small quantity of unhealthy pus escaped from a fistulous opening, which existed opposite the digital extremity of the fourth metacarpal bone, and from which hung a portion of diseased tendon; a probe passed readily from this opening along the course of the deep flexor tendons and for some distance beneath the annular ligament at the wrist; there had been a copious discharge of matter from this opening for many weeks, which, however, had entirely ceased for several days; he had not slept soundly for the last three weeks in consequence of the pain in the hand and wrist; bowels constipated.

Ordered a brisk purgative immediately, and when this had operated freely a sedative, consisting of 3ss. of Battley's sedative solution of opium, and a linseed poultice applied to the hand.

Nov. 16.—The bowels have been freely relieved, and the opiate occasioned a sound night's rest; there is a free discharge of healthy matter from the wound in the hand; feels much relieved and more free from pain than for some time past. The opiate to be repeated at bed-time.

17th.—With the assistance of my friends Messrs. Hunt and Melland, chloroform was administered, and, a grooved director being introduced, an incision was made throughout the whole extent of the sinus, dividing the arteries forming the palmar arch and a portion of the annular ligament, and the diseased portions of fascia and tendon dissected away; about half an hour was fruitlessly spent in endeavouring to secure the divided vessels, which, owing to the diseased state of the parts, it was found impossible to do, and the patient becoming very much exhausted, it was decided to cut down upon and secure the brachial artery; this was immediately done, and the hæmorrhage arrested; no sutures were applied to the hand, which was simply dressed with lint and poultice. Three doses of laudanum, amounting, in the whole, to 3iij ss., were given to the patient, by Mr. Hunt, during the latter part of the operation, with the most beneficial result, and without producing any other signs of narcotism than a contracted pupil.

8 p.m.—Has not slept since the operation; there has been a slight hæmorrhage from a small artery, which had been divided in the incision for securing the brachial artery; slight pressure arrested this immediately; there has been no hæmorrhage from the hand.

18th.—Has passed a good night, without pain or restlessness.

22nd.—Upon removing the poultice, about half an ounce of blood escaped in the direction of the wounded palmar artery; the hand has resumed its natural position, and both hand and wrist have nearly resumed their natural size; the patient can bear moderate pressure at the wrist without pain; pulsation can be distinctly felt in the radial artery; the wound in the hand is rapidly closing up, a small portion only of sloughing fascia remaining near the wrist.

23rd.—The remaining portion of slough was removed this morning. Upon making firm pressure over the wrist, a small quantity of pus escaped from under the undivided portion of the annular ligament, and a probe passed easily for about an inch from the deepest part of the wound into the wrist; a bandage was applied firmly round the wrist, and the hand placed in a more dependent position, to allow of the free escape of pus. Ordered a mild aperient, the bowels not having been relieved since the operation.

25th.—The pressure at the wrist appearing to do more harm than good, was discontinued.

28th.—A fluctuating tumour having gradually formed above the wrist, a free incision was made, commencing about three inches above, and extending to the annular ligament within an inch of the former incision, it being considered desirable to save as much of the annular ligament as possible undivided. A copious discharge of pus followed the knife, and the pulse, which had, before the operation, been 120, shortly sank under the influence of the operation, and about 30 drops of laudanum to 81.

Dec. 5th.—No discharge of matter from any part of the wound; the incision in the hand has nearly closed up.

24th.—Both wounds completely healed, and the patient is gradually recovering the use of the thumb and uninjured fingers.

Rusholme, Manchester.

ON THE EMPLOYMENT OF UREA AS A DIURETIC.

By T. H. TANNER, M.D.,

Licentiate of the Royal College of Physicians, Physician to the Hospital for Women, etc.

It has been frequently remarked, that of all classes of medicines in the Materia Medica, none are more uncertain in their operation, or less to be depended upon, than diuretics,—a remark the truth of which can be corroborated by most medical practitioners. Unfortunately, also, their unequal mode of action is seldom more painfully felt than when the influence of these remedies is especially desired to promote the absorption of dropsical effusions,—the most legitimate object, perhaps, for which they can be used. It was during the treatment of a tedious case of dropsy, dependent upon heart disease, that, after a trial of most of the agents known to possess diuretic properties, I was led to employ urea, the principle which it is doubtless the chief function of the kidneys to separate from the blood, forming, as it does, nearly one-half of the whole solid constituents of the urine.

Urea was first obtained pure by Dr. Prout, in 1817; its artificial production from cyanic acid and ammonia was discovered by Wöhler, and is interesting as being the first example of an organic product artificially formed. Dr. Prout thus describes the method of procuring it. "Fresh urine is to be carefully evaporated to the consistence of a syrup, and to this, when quite cold, pure concentrated nitric acid is to be added by degrees, till the whole becomes a dark-coloured crystallised mass, which is to be slightly washed with cold water, and suffered to drain. To this mass is then to be slowly added a pretty strong solution of the subcarbonate of potash or soda, till the whole becomes neutral; and the solution thus formed is to be carefully concentrated by evaporation, and set aside, in order that the nitre formed may crystallise, and thus be separated. To the impure solution of urea left, animal charcoal is to be added in such quantity as to absorb the whole fluid and form a thin paste, which may be suffered to lie for a few hours. Cold water is to be added to this paste, which separates the urea, and the colourless solution thus obtained is to be slowly evaporated to dryness at a low temperature. The resulting mass is then to be boiled in strong alcohol, which takes up the urea, and leaves the remainder of the nitre and most of the other saline substances behind; and from this state of solution in alcohol the urea may be readily obtained crystallised and pure, though it is generally necessary to repeat the process of crystallisation from the alcohol two or three times."—Medico-Chirurgical Transactions, vol. viii., p. 528.

Another plan has been proposed by Dr. Gregory, for obtaining this agent, according to which the concentrated urine is to be saturated by oxalic acid, crystals of oxalate of urea being produced; these, dissolved in water, decoloured by animal charcoal, and decomposed by digestion with carbonate of lime, yield a solution from which colourless crystals of urea may be procured.

The easiest and cheapest way of preparing it, however, is found to be artificially from cyanate of ammonia, by the process recommended by Liebig. Twenty-eight parts of dried ferrocyanide of potassium and fourteen of peroxide of manganese are mixed in powder, and calcined upon an iron plate, heated to dull redness; the mixture takes fire, but is gradually extinguished, and must be stirred while cooling, to prevent agglutination. The cold mass is then powdered, and digested in cold water, which dissolves the cyanate of potash; this solution is filtered off, and set aside; the remaining powder is then washed with a second portion of cold water, and again filtered, and in this liquid is now dissolved 20·5 parts of sulphate of ammonia, and the solution added to the first filtered solution of the cyanate. A large quantity of sulphate of potash is deposited, which is strained off, and the filtered liquid now containing, with some sulphate of potash, all the cyanate of ammonia, is evaporated to dryness, during which process the cyanate of ammonia is transformed into urea. The dry mass is digested in alcohol, which only dissolves the urea, and yields it pure on evaporation.—Liebig, Annalen der Pharm., xxxviii. 108.

In whatever way urea is procured, it appears in the form of delicate silvery acicular crystals, which are seen by the microscope as four-sided prisms; they are colourless when pure, free from odour, and generally resembling nitre in appearance, possessing also a similar cooling saline taste. The crystals are soluble in their own weight of cold water, and in every proportion of hot, their solution being neither acid nor alkaline. The composition of urea is $C^2\ O^2\ H^4\ N^2$.

The preparation which I first employed was obtained by Mr. Garden, of Oxford-street, from urine; Mr. Cocksedge, chemist, of New Oxford-street, has since procured some from the same source, and has prepared some of the prescriptions in which I have ordered it. It is, of course, unnecessary to say, that whether this agent be procured from urine, or prepared artificially, it ought to possess the same properties, and consequently be capable of producing the same effects. I must, however, remark, that I prefer the preparation obtained from the urine, my reason for this preference being, that in trying some experiments upon a dog, I found that the urea obtained from the cyanate of ammonia was less efficacious. At the same time, I would mention, that as my experiments were very roughly carried out, the difference may have been due to other unobserved causes. It was unnecessary to resort to experiment to prove that urea, medicinally administered, does not exert any deleterious or poisonous agency upon the system, because this had already been done by Dr. Todd. This gentleman injected half a drachm of urea into the vein of a dog, the only effect produced being an excessive secretion of urine, so that the place where the animal was kept was literally flooded in an hour or two by the frequency and quantity of his micturition. In the human subject a copious diuresis has been the only effect produced; in none of the cases in which I have employed it has it given rise to any unpleasant symptoms whatever. The ordinary dose, on first being used, is ten grains every six hours, dissolved in water flavoured with syrup; as its effects decrease, the dose may be augmented to a scruple or more. At the same time, its action should be aided, as that of all diuretics should be, by the free administration of diluents, as well as by keeping the skin moderately cool. From observation of the mode in which medicines are prescribed in the present day, I fear that by far too little attention is paid to those collateral circumstances which assist the action of all remedies, and which in certain cases, if unattended to, render our efforts useless, effects being produced the opposite to those intended. Boerhaave, the great medical luminary of the seventeenth century, first pointed out that many diuretics may be so administered as to prove sudorifics; and Dr. William Alexander taught that "the salt of tartar and of nitre, though among the most powerful diuretics, when taken with large quantities of warm liquids, if the body be well covered, prove excellent sudorifics, and do not increase the quantity of urine."—Experimental Essays: Lond. 1770. p. 155.

None deny the truth of these observations: I would only intimate that they are not sufficiently attended to.

It would be worse than useless to occupy the space of this Journal by a recital of the few cases in which I have employed this agent as a diuretic. It may suffice to say, that, in the first instance, and the one in which I more particularly noted its effects, the quantity of urine secreted in the twenty-four hours previous to its administration was only fourteen ounces (high-coloured, acid, sp. g. 1018), whereas, in the succeeding twenty-four hours, during which three doses of ten grains each were administered, the secretion amounted to forty-four ounces (pale, acid, sp. g. 1013). The remedy was continued for the ensuing nine days, in doses of ten grains every six hours, during which period the urine varied in quantity from forty-nine to thirty-eight ounces. At the end of this time it was discontinued, as the dropsy had been temporarily removed; and, on again having recourse to it three weeks subsequently, its effects were as satisfactory.

In conclusion, I would remark, that urea has been prescribed before, especially by some French physicians. The object of these remarks, therefore, has been, not to introduce a new remedy, but to bring forward one which does not appear to have been sufficiently appreciated.

Charlotte-street, Bedford-square.

SUCCESSFUL CASE OF LIGATURE BOTH OF EXTERNAL ILIAC AND SUPERFICIAL FEMORAL ARTERY

ON THE SAME SUBJECT.

By HENRY SMITH, Esq.,

Surgeon to the Westminster General Dispensary.

In the *Medical Times* for October, 1850, I published the case of Thomas Whitton, aged 37, upon whom I had recently performed the operation of tying the external iliac artery on the left side. The disease for which I tied the vessel was an aneurism high up in the thigh. By reference to the published account, it will be seen, that the patient rapidly recovered from this severe proceeding without a single bad symptom; and he returned to his occupation.—which, unfortunately for him, was one calling for a considerable share of muscular exertion on his part. A few months after he had returned to his work, a hernial protrusion appeared in the situation of the wound in the abdominal parietes, for which a truss was applied, and has been worn since; with the exception of this inconvenience, the man suffered in no way from the effects of the operation.

During the past year, he called my attention, on more than one occasion, to the circumstance of his suffering from muscular pains in the limb of the opposite side; and, on the 18th of January, 1852, he came to me, complaining of swelling of the foot, and numbness in the lower part of the right leg. On observing this, I at once suspected that there was an aneurism, and, on examining the popliteal space, I discovered a large pulsating tumour, which presented all the features of that disease. The knee-joint was enlarged and swollen, and there can be no doubt that the aneurism had existed in this situation for some length of time, or that it had recently formed, and very rapidly attained its present size. The patient himself had only observed the symptoms which led him to come to me the day previously. I at once advised him to go home and lie quietly in bed for a day or two, and take some opening medicine, to prepare him for the operation which I proposed to perform.

On the 21st, I placed a ligature upon the superficial femoral artery. I commenced the incision about three and a half inches below Poupart's ligament, carrying it downwards to the extent of about three inches; in this were included the superficial tissues. I next divided the fascia lata, and came upon some muscular fibres, which at first I thought were those of the sartorius, but, on closer examination, it was discovered that they belonged to the adductor longus. Consequently, it was necessary to get a little more outwards, when the edge of the first-named muscle was exposed, and the artery was readily felt, lying deeply down in the angle formed by the two muscles. Its sheath was opened with care to the extent of an eighth of an inch, and the aneurism-needle was cautiously carried around the vessel from the inner side, and the artery was tied. The pulsation in the aneurismal tumour immediately ceased. In the evening the patient was cheerful, and feeling comfortable; pulse 88; toes cold.

22nd.—Pulse 88; some pain in the limb.

24th.—Has had a good deal of pain down the limb, and sensations of pins and needles in his foot and toes. I this day took off the dressings, and found the wound looking remarkably well; pulse 90; bowels open; no fever.

February 2.—Wound all united except at that point where the ligature hangs out, and one other point below where one of the sutures was inserted; the aneurismal tumour is much diminished in size.

10th.—Ligature came away; the patient was ordered to remain in bed for a week, at the end of which time he got up, and at the end of the month he was enabled to walk out.

I have since carefully examined this patient, and also have submitted him to the inspection of the Fellows of the London Medical Society. There is a firm cicatrix in the situation where the external iliac artery was tied, and no hernial protrusion through the deficiency in the abdominal wall; the arterial pulsation can be plainly distinguished just below Poupart's ligament, and be felt some short distance down the thigh. I cannot, however, make out any pulsation in the popliteal artery, or in the anterior or posterior tibial. On the right side the common femoral can be distinguished by the pulsation; but, as in the other extremity, no impulse can be detected in the several arterial trunks, nor as yet have I been enabled to find out unusual pulsation in any part which would indicate any particular enlargement of the branches of the chief arteries. I could distinguish only a slight, hard, round substance in the upper portion of the right popliteal space, the remains of the aneurism. The patient enjoys free use of his limbs; the temperature in each appears to be natural, but he occasionally feels some muscular pains in the limb last operated upon.

Ever since John Hunter first performed his operation of tying the superficial femoral artery, in 1785, a proceeding, indeed, which was the indication of a great and successful era in the history of surgery, this vessel has been so often tied with success, that the publication of such a case would now-a-days be, perhaps, deemed superfluous, unless there was some peculiar interest connected with it; and, in fact, now that another revolution is being brought about in reference to the treatment of some forms of aneurism, an unsuccessful case would, perhaps, be considered of more practical interest, as the causes of failure must be thoroughly inquired into and appreciated by those who are endeavouring to establish a new method of treatment, for their success in convincing the Profession will depend upon their pointing out the several dangers which follow upon the ligature of a large arterial trunk, and showing that, by another mode of proceeding, all or most of these dangers may be avoided. However, it is more pleasing for me to be enabled to bring before the Profession, not only a case which has turned out to be successful, but one which has connected with it an unusual amount of interest, in consequence of the subject of the operation having previously undergone the more severe operation of ligature of the external iliac artery. There have been, I believe, a few cases on record in which either artery of the thigh has been successfully tied on the same individual, and—going away from this region—we are all familiar with the remarkable instance of ligature of either common carotid vessel by the celebrated American surgeon, Mussey; but I have no recollection of meeting with the recital of a case in which, like this, the external iliac on one side, and the superficial femoral on the other, have been ligatured with success; and, therefore, I may perhaps not be considered presumptuous in hoping that the record of this case may be looked upon with special interest by those whose delight it is to view the success of surgery. There cannot, moreover, be a case on record which more completely attests the great triumph of the doctrine which our immortal John Hunter first promulgated and first successfully carried out; and for this reason alone I look upon this case as one of paramount interest. Independent of this consideration, too, it will not be the less interesting, as marking the progress of surgery, when we call to mind, that it is not a hundred years ago that Burchell first tied the femoral artery in the Manchester Infirmary.

I have already been asked why I did not apply compression instead of tying the superficial femoral artery; and to that question I answered as now, that the patient recovered so rapidly, and without the least unfavourable symptom, from the more formidable procedure of tying the external iliac, and he was so good a subject, from his courage, patience, and physical conformation, for an operation, that we had the strongest reason to suppose that he would do equally well after the less serious measure; and the result shows that I was not deceived in my anticipations. Still, if the patient himself had determined upon it, I should have employed compression; and on any other occasion shall always submit this method of treatment to the consideration of the patient.

I have stated, that a few months after the external iliac had been tied, and the patient had returned to his work, there was a hernial protrusion through the weakened abdominal wall. For this I applied a truss. Since the man had been confined to the horizontal posture, however, this protrusion disappeared, and even when he takes his truss off there is no protrusion; but I have desired him to wear it, as he finds relief, and it may obviate danger.

In reference to the operative process, there is one point of interest. It will be found, that after making my incision through the fascia lata, I came upon some muscular fibres, which at first I took for those of the sartorius; but on strict examination they were discovered to be the edge of the adductor. This confounding of the two muscles may, I believe, easily occur, but is as easily rectified by attending to the course of the vessel, which, however, is situate at this

point much more deeply than some might imagine. I had a much greater difficulty in carrying the aneurism needle around the artery here than in the iliac fossa, for the vein was much more in the way than in the case of the iliac artery, and I was much more fearful of wounding it; and, indeed, it would have been much more easy to do so.

In conclusion I have to state, that I was as ably assisted in the second operation as in the first by Mr. Fergusson, and by Messrs. Nunn, Gay, and Borlase Childs.

13, Caroline-street, Bedford-street.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. MARY'S HOSPITAL.

By HARVEY LUDLOW, Esq., M.R.C.S.,
Late House Surgeon at St. Bartholomew's.

LITHOTOMY.

Much as the manner of operating for stone has been improved, and simple as it has now become, there are contingent circumstances which must ever make it formidable, and complications perplexing to the ablest surgeons continually arise, with which, therefore, we should be acquainted and ready to grapple. The cases here briefly reported, are intended to illustrate some of the difficulties which beset the operator, and to point out the means now practised by eminent surgeons for overcoming them.

Case 1.—Robert Long, aged 11, was admitted into St. Mary's Hospital, April 4, under the care of Mr. Coulson.

He had suffered since birth from incontinence of urine, a symptom which became more distressing during the six months preceding his admission. The child manifested no signs of pain, did not pull the prepuce; there was a small quantity of blood and mucus mingled with the urine; but except the frequency of micturition, and occasionally the sudden stoppage of the water, no unequivocal symptom of calculus was present.

The parents stated, that some time ago he had been tormented with pain, and was continually pulling the prepuce; but this symptom passed away, and for a few weeks before admission he had apparently not suffered at all. On being sounded, a stone was detected, evidently not resting on the base of the bladder, but lodged in the fundus, closely adjacent to the anterior wall, for it was only when the handle of the sound was depressed and its point brought forward, that it could be struck.

On the 7th Mr. Coulson proceeded to operate. The bladder was penetrated by a beaked knife, but when the operator's finger was introduced, the stone could not immediately be felt, and being situated quite anteriorly, and, in all probability, adherent to the front wall of the bladder, some difficulty would have been experienced in extracting it, had not the pelvis of the child been raised before the introduction of the forceps. By adopting this measure the stone was readily seized, and the operation completed within a minute. There was scarcely any blood lost. The subsequent progress of the patient was good; he was able, in a fortnight, to void his urine by the natural passage, and the cicatrisation of the wound is now fast advancing.

Adherence of a calculus to some part of the vesical parietes, is in children not infrequent, and may prove a source of deception in the diagnosis, or of embarrassment in the operation. When a stone previously loose becomes adherent, all or most of the symptoms more or less decisive of its presence vanish; as the stone no longer falls against the neck of the bladder, the stream of urine is not impeded, nor is there any pain felt at the extremity of the penis; the bladder, indeed, hypertrophied, morbidly irritable, and still stimulated by the presence of unhealthy urine, discharges its contents with unnatural frequency, and blood and mucus will, in all probability, be mingled therewith; but the more definite and pointed indications of calculus have departed, and a superficial observer might be easily deluded into the notion, that his young patient was suffering from vesical disease, unconnected with the presence of vesical calculus. I am acquainted with an instance in which a boy in a large school suffered for three or four years from incontinence of urine, and inability to command his motions, but was not much tormented with pain, and in whom, though he was sounded on two or three occasions, no calculus could be detected. The lad was at length brought to London to consult Mr. Lloyd, and that gentleman failed, on the first examination, to detect a stone. Subsequently, however, having placed the boy under the influence of chloroform, (a proceeding which had not been previously practised,) he succeeded in finding one which he afterwards removed by operation.

Incontinence of urine, thus long established, does not always disappear with its source. Whether from the inveteracy of habit, the persistence of an unhealthy state of the urine, or the slowly departing irritability of the bladder itself, it may continue; and, influenced by such causes, either acting singly, or in combination, this most distressing and unpleasant affection is not invariably removed with the calculus that originated its existence. With reference to this point, the condition of the boy on whom Mr. Lloyd operated is scarcely meliorated since the extraction of the stone.

There are thus two sources of deception: one in which absence of decisive symptoms causes the existence of stone to be overlooked, and the case to be regarded as one merely of high vesical irritability; the other, in which a patient from whom stone has already been extracted, presents still persistence of symptoms, which previously indicated the true nature of his malady, and may lead the surgeon to search for another concretion, and thus perpetuate his own delusion, by heightening, through the introduction of sounds and other instruments, that morbid condition established by long irritation, and subsiding by slow degrees. Under the former of these circumstances, it will be absolutely necessary to sound the patient with care and diligence, and to repeat the proceeding until either a calculus is detected, or till unsuccessful explorations by various hands have rendered its presence improbable. It appears essential, however, that the patient should be narcotised by inhalation of chloroform before undergoing a search always more or less painful, and generally rendered useless by the cries and struggles of the child, unless the powers of this anæsthetic are brought to bear. Its administration saves much suffering, facilitates extremely the discovery of stone in children, and often enables the surgeon to accomplish at one trial that which he can only accomplish by several without it. Where, however, an operation has been performed already, perhaps at no distant date, it will be well, in the absence of decisive indications, to refrain from at once introducing instruments, which may sensibly augment the existing evil, and can scarcely do good, and to leave the patient to reap the advantage of that restoration which the powers of Nature and the march of time will in all probability sooner or later afford him.

Not only, however, may errors in diagnosis result from the adhesion of a calculus; it becomes, in addition, a source, and sometimes a serious source of difficulty in the operation adopted for its removal. In the case reported here, Mr. Coulson was fully prepared for the event, and had, prior to the operation, satisfied himself that the stone would not probably be found at the base of the bladder. Indeed, when the operator had passed his finger into the bladder, a second or two elapsed before he touched the stone, and it was then found lying close to the anterior wall, contiguous or connected to the mucous membrane. In consequence of the elevation of the pelvis, the calculus was removed without difficulty; but, had this precaution been neglected, or had the stone been small, and not easy to seize, the operation might have been much prolonged, and its last stages would undoubtedly have not been so readily executed. A complication of this nature occurred about the beginning of last March to Mr. Skey. That gentleman, on the same day, cut two children for stone. In the first case, the stone was caught and extracted without difficulty, and the operation was rapidly finished; but in the second, a small stone, resembling an almond in shape, happened to adhere closely to the front wall of the bladder, and as the urine had been discharged, the operator found it no easy matter to lay hold of it. This, however, he at length accomplished, with a pair of cross-blade dressing forceps. A child, on whom Mr. Wormald operated last year, had prolapsus ani in conjunction with calculus vesicæ, a condition brought on no doubt by the frequent and violent efforts at defecation which occurred whenever the irritable bladder expelled its urine; the consequence was, that the lower part of the bladder became dragged down by the protruded bowel, and a cul de sac was formed behind and below the vesical neck in which the stone was lodged. This being small, could just be felt by the end of the finger, but it was found impossible to depress sufficiently the blades of the forceps to grasp it. All these instruments passed beyond its point of rest. Elevation and concussion of the pelvis failed to stir it. At length Mr. Wormald passed his finger into the rectum, tilted up the pouch, and the stone within it, and then succeeded in seizing the latter at the neck of the bladder. Naturally, in very young children, the bladder is almost without what is termed by the French the *bas fond*. There is an absence of that descent, that broad, full pouch which rests on the rectum, and comprises the trigonum vesicæ in the adult. Perhaps it is owing to this disposition of parts, and also to the more complete emptying of the blad-

der effected by children, so that the vesical walls are brought in closer contact, that stone becomes occasionally adherent in these young subjects. Such a complication is, I believe, never, or most rarely, met with in individuals of advanced life, persons in whom the bladder is fully grown and shaped, and in whom, probably, the retained calculus possesses greater relative weight than in children.

During the last twelve months, Mr. Coulson has performed five operations for stone at St. Mary's Hospital, all on very young children. He observes, in his lately published work, (on Diseases of the Bladder and Prostate, page 307,) that "it is undeniable, that the disease is very frequent under the age of puberty, in ill-fed, badly-clothed children." However, it appears that, if the poor suffer in childhood, the wealthy are visited in advanced life; for Mr. Coulson remarks:—"Among those beyond the middle age, stone occurs more frequently in persons of sedentary habits than in those who lead an active life, and much more in those who indulge in luxurious living than in the temperate and abstemious."

Among the cases operated on at St. Mary's, one, a child of four years, three hours after the operation, suffered from hæmorrhage, which, however, was easily controlled, and the child recovered subsequently without an unpleasant symptom. All the other cases rapidly got well. Now, hæmorrhage from the wound after lithotomy, though unusual, is occasionally met with, and becomes, especially in children, an accident at once dangerous and formidable. It may arise from division of arteries, or division of veins. When the artery of the bulb is given off low down, and is large, or when the internal pudic terminates in the superficial perinæal, or in the artery of the bulb, the penis being supplied by an accessory vessel often as large as the pudic itself—a vessel which, from its close proximity to the prostate and membranous portion of the urethra, can scarcely escape division by the incisions requisite for the operation, when such irregularities of arterial distribution are present, the resulting hæmorrhage is in the highest degree alarming, and not unfrequently fatal. Accidents of this sort are, however, rare; but there is a kind of hæmorrhage of more frequent occurrence,—a venous hæmorrhage, which bursts out suddenly some hours, possibly even some days, after the operation. It is often difficult to check, and, if not checked, it kills the patient. Hæmorrhage of this description arises from a division of the prostatic venous plexus, whose component vessels may be large, and may extend further forwards than usual. The cut mouths of these vessels are in all probability at first closed by loose clots, which sooner or later get washed away, and blood escapes outwards through the wound, and inwards into the bladder. Two cases of this secondary hæmorrhage are related by Sir B. Brodie, one having occurred in his own practice, the other in that of Mr. Earle. In both instances seven or eight days had elapsed from the operation before its appearance. Sir B. Brodie and Mr. Coulson are inclined to regard this peculiar hæmorrhage as the result of the separation of a slough; but I have seen instances of extensive sloughing of the wound after lithotomy, in the greater part of its depth, and yet no hæmorrhage supervened; while, on the other hand, secondary bleeding happens in cases where no sloughing can be discovered. Whatever its source, it is not always easy to suppress; plugging with dry lint, or with lint steeped in the strong infusion of matico; turpentine, applied in accordance with the recommendation of Mr. Vincent; or the tinct. ferri. sesquichloridi have succeeded in staunching it, and will unquestionably often succeed; but it should never be forgotten, that though the external effusion may be prevented, yet blood may continue to escape internally into the bladder, and the patient become alarmingly weakened in consequence. Mr. Lawrence operated on a boy in whom hæmorrhage supervened, and persisted in spite of every application; it was at last commanded by the hourly exhibition of sulphate of quinine in large doses, and in similar instances the same remedy, whose powers of controlling passive hæmorrhage are certainly great, might be employed with similar success.

Lithotomy exemplifies, perhaps more strikingly than any other operation, the great advantages conferred on practical surgery by chloroform. Mr. Coulson observes, (p. 380,) that prostration after lithotomy has certainly been less common since the introduction of anæsthetics; and many other eminent hospital surgeons entertain the conviction, that not only are the patients benefitted by being relieved from pain during surgical operations, but that they are absolutely better afterwards, are less liable to die, and more rapidly restored to health, than they were previous to the discovery of anæsthetic agents. The fatality of lithotomy has, I am persuaded, greatly decreased during the last five years, especially as regards children. Formerly extreme terror, and other mental emotions occasionally brought on prostration, which proved fatal in a few hours, although all the circumstances connected with the operation had been favourable. Examples of such an occurrence are recorded by Mr. Travers in his work on Constitutional Irritation, and most surgeons of experience have witnessed them. Perhaps, therefore, it would be difficult to select an operation which, more forcibly than the operation for stone, demonstrates the unequivocal advantage of removing the body from the agitating influences of the mind.

SCIENTIFIC LECTURES.

TUESDAY, THURSDAY, AND SATURDAY, MAY 11, 13, AND 15.—ROYAL COLLEGE OF SURGEONS. *Subject*:—Professor PAGET, "On Malignant Tumours."

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening, May	8.	ROYAL INSTITUTION. *Subject*:—Prof. FARADAY, "On Points Connected with the Non-Metallic Elements." Three o'Clock.
——	——	MEDICAL SOCIETY OF LONDON. *Subject*:—J. F. BROWN, Esq., "On the Treatment of Ovarian Dropsy by a New Method of Operation." Eight o'Clock.
Monday,	May 10.	ROYAL INSTITUTION. *Subject*:—J. CONOLLY, M.D., "On Insanity." Four o'Clock.
Tuesday,	May 11.	ROYAL INSTITUTION. *Subject*: — E. LANKESTER, M.D., "On the Physiology of Plants." Three o'Clock.
——	——	ROYAL MEDICAL AND CHIRURGICAL SOCIETY. Half-past Eight o'Clock.
Wednesday,	May 12.	ROYAL INSTITUTION. *Subject*:—J. CONOLLY, M.D., "On Insanity." Four o'Clock.
——	——	HUNTERIAN SOCIETY. *Meeting of Council.* Half-past Eight o'Clock.
Thursday,	May 13.	ROYAL INSTITUTION. *Subject*: — R. WESTMACOTT, Esq., R.A., "On the History and Practice of Sculpture." Three o'Clock.
Friday,	May 15.	ROYAL INSTITUTION. — *Subject*: — REV. E. SIDNEY, "On the Rise of the Sap in the Spring." Half-past Eight o'Clock.
Saturday,	May 16.	ROYAL INSTITUTION *Subject*:—Prof. FARADAY, "On Points connected with the Non-Metallic Elements." Three o'Clock.
——	——	MEDICAL SOCIETY OF LONDON *Subject*:—Dr. W. V. PETTIGREW, "On Burns and their Treatment." Eight o'Clock.

Medical Times & Gazette.

SATURDAY, MAY 8.

THE VICE OF SPECIAL HOSPITALS.

IT must certainly strike every one as a singular contradiction, that, while charity sermons are preached on behalf of distressed medical charities, and the most piteous of appeals are made, through the advertising columns of the *Times*, for support to hospitals in the last stage of syncope, new schemes for little pocket-sized editions of similar institutions, but mostly of a special character, are continually obtruding themselves, and every art used, legitimate and illegitimate, to attract the attention of the charitable.

Thus, an entire floor of the Charing-cross Hospital is silent and deserted; Westminster Hospital cannot afford to make up half its number of beds; and the University and St. Mary's Hospitals have many vacant wards. Now with all this poverty of existing institutions confessed before the world, we find two new and insignificant institutions, the Cancer and Fistula Hospitals, springing up, and demanding a share of those contributions which are already drained so dry. If the purse of the charitable public was so deep that, like the sea, we might dip again and again into it without appreciably diminishing its supply, there then might be one objection the less to multiplying demands upon it; but, when it is so well known, that those who give form a comparatively small class dis-

tinct from the community at large, it becomes the part of the Journalist to urge that those funds shall not be wasted, as they undoubtedly are, by the multiplication of small hospitals.

It must be very evident, that one large hospital, containing, say, 300 beds, all under one roof, and worked by one staff, can be maintained much more economically than half a dozen of 50 beds each, every one having its own building, secretary, matron, etc. etc. But, supposing the case to be as it really is—that there is no need of erecting a building to contain this number of beds; that they really exist in institutions fully appointed and at work; how clearly it is seen that these new schemes are unjustifiable attempts upon the pockets of the charitable.

It might be answered, that it is not expedient to receive certain special diseases at general hospitals. There are some maladies, perhaps, that it is as well not to mix with others. Phthisis, from the uniform temperature its treatment requires—fevers, and infectious diseases, might call for special arrangements. But we are not so certain that even these require distinct buildings; and the determination of the Governors of the Fever Hospital to open their wards to other diseases strengthens us in the doubt. Hospitals for sick children, and such as have lately been proposed for incurables, are not objectionable; but what on earth is there in the nature of either cancer or fistula to necessitate separate establishments,—unless it be the private ends of those who promote them?

If it is thought expedient for the further investigation of the former fatal disease, that it be made a special study, which we do not deny, why not open a ward for its treatment in some existing hospital, instead of spending money uselessly in bricks and mortar? The 5000*l.* collected for the building fund of the Fistula Hospital, or St. Mark's, as its promoters, with a Yankee delicacy, intend to call it, would furnish Charing-cross and the University Hospitals with double the number of beds they now possess, and leave a sufficient surplus for their working expenses. While the 3000*l.* now probably thrown away in creating a separate establishment for cancer, would set up the Westminster Hospital, and afford room for many more patients than Dr. Marsden contemplates to receive.

In Vienna, where the best hospital accommodation in the world is to be found, they manage things differently. The Allgemeine Krankenhaus, or common hospital of that city, contains three thousand beds; and here different wards are appropriated to different diseases. The modern principle of division of labour, which is a necessity of the age, and which we by no means wish to oppose, is carried out to its full extent; but our English error of special hospitals is avoided. The student can pass from one ward to another; have under his eye at once all the maladies which afflict humanity; mark their bearings upon each other; and easily trace the general unity of disease. Great and effective medical schools can alone ariseout of such consolidated institutions.

The vice of our special hospitals, stuck in every conceivable corner of the vast desert of London, is made the more evident by contrast with the example cited. Its tendency is to destroy medical schools;—to drain and starve the great hospitals, both of money and instructive cases; and if it goes on, and every disease to have a widely separated location and charge for study, a Hansom cab and a long purse will be required by the student to perfect his education.

Let us repeat, that we by no means wish to oppose specialties. Medicine is grown too wide a science for any individual mind to grasp. It is as indispensable for our surgeons and physicians to be rendered facile of hand, and keen of diagnosis, by the study of special diseases, as it is to have division of labour in our manufacturing system. But we do object to the division of disease brought about by special hospitals, and, as we have shown, the consequent destruction of our medical schools, and the frittering away of the funds of the charitable. Ourselves, in common with all disinterested medical men, must look with suspicion upon the motives of the projectors of schemes having such a tendency; and we shall not fail henceforth to combat any attempt to create further mischief in this direction.

UNIVERSITY COLLEGE.

The announcement we made, a fortnight ago, that Mr. Maclise had been appointed Assistant-Surgeon to University College Hospital, proves to have been incorrect. The appointment of Mr. Statham, of whom we previously knew little or nothing, has taken us by surprise; and as it has, moreover, been brought prominently before the Profession, we shall place before our readers a correct version of the case. It is no part of our duty to defend hospital authorities; but if now, or upon any other occasion, the impartial statement of truth should prove to have that effect, we shall not regret the result.

The election to the Assistant-Surgeoncy, as to every other medical office in the hospital, is, we find, vested in the Council of the College. But the claims of the candidates must, in the first instance, be inquired into by the Medical Committee; and it is the duty of that body to report upon them to the Council. Such, it seems, is the substance of the bye-law upon the subject. Now as to the case before us. Several former students of the hospital having become candidates for the office vacated by Mr. Cadge, their testimonials were received by the Medical Committee, and a Sub-Committee proceeded to inquire into their value. In due time *two* candidates—Mr. Maclise and Mr. Statham—were selected from the entire number; and of these the preference was given by the Committee to Mr. Maclise. This recommendation was, we are informed, unanimous.

Respecting the claims of Mr. Maclise, it is unnecessary to say more than that they consist in his published works on the archetype skeleton and on surgical anatomy. With their merits our readers are fully acquainted. Of Mr. Statham we have learned that, after having distinguished himself at the Examinations for Honours in the College, and in the University of London, and having held office in the hospital, he assiduously and practically studied anatomy and surgery at Paris; and we further understand, that the manuscript records of his labours were considered by the Medical Committee to be highly meritorious. Mr. Statham, moreover, served as surgeon in the army of Schleswig-Holstein during the recent contest in that country, and was attached to one of the large hospitals for the wounded. Besides the notes of individual cases observed by him, he laid before the Medical Committee a manuscript, containing general inferences suggested by what he witnessed; and this paper was considered by the Committee to evince much aptitude on the part of its author for the investigation of surgical diseases. The Committee had also evidence before them, that Mr. Statham had successfully performed important surgical operations.

The Report of the Committee, containing a full detail of the career and the labours of all the candidates, was considered by the Council at repeated meetings, one of which was held for the purpose of a conference with the Dean on the part of the Medical Committee; and, at length, the subject

was concluded by the adoption of the following resolution, which has since been transmitted to the Medical Committee:—

"Resolved,—That the Medical Committee of the Hospital having, in their Report to the Council on the subject of the relative merits of the candidates for the office of Assistant-Surgeon, stated, 'that the choice must lie between Mr. Statham and Mr. Maclise,' it appears to the Council that, great as Mr. Maclise's merit is, yet Mr. Statham, whose 'perfect aptitude for the duties of the office' the Report recognises, is more fully qualified, by practical experience and acquaintance with the operative department of surgery, for the peculiar duties of Assistant-Surgeon; that, therefore, Mr. Statham be appointed Assistant-Surgeon to the Hospital."

But how came it, that the conclusion arrived at by the two Bodies was different? We think that the explanation may be found in the Report itself. For if the Committee did not give to Mr. Maclise's practical experience and aptitude, a sufficient degree of weight to balance the strong statement and the high commendation they (as the resolution of Council itself shows) used in reference to Mr. Statham; it is not unnatural that a body of laymen, looking to the care of the patients in the hospital as the primary object for consideration, should prefer the man appearing on the face of the Medical Report to be by his previous habits the better fitted for this purpose. It may be very wrong, and we hold it be so, for laymen to act in such a the matter; but still, looking to the bye-laws under which the Council acted, it is plain that there was nothing unconstitutional in their proceedings. Neither was such a course "unheard of" in the College; for it is well known, that the Council always exercise an independent judgment in matters of the same kind.

Here we would willingly have taken leave of this subject, but for some remarks that it has elsewhere elicited. What connexion there is between the election of an Assistant-Surgeon to the Hospital and the expenditure of the capital of the College, is not very apparent; and yet it is stated, that the College has drawn for its "daily support," on its endowed funds, invested for other purposes, to the extent of 23,000*l.*, etc. This is a pure invention; and, moreover, the inventor has carefully concealed the facts, that a large chemical laboratory, a large dissecting-room, lecture-rooms, the great library and hall, have all been built and furnished, and the expenses defrayed out of this capital. We have yet to learn, that the erection of new buildings is properly included under the head "daily support;" and that capital is not as properly, as it is customarily, used to defray the charges.

It is also said, that undue influence has been exercised over the Council in the late election, and insinuated that an individual member of the College has governed it for many years. If this be true, what comes of the statement already adverted to, that a departure from the recommendation of the Medical Committee is "unheard of"? To the absurd allegation, that secret influence was exerted on the Council, a sufficient answer will be found in the names of that body (a), eighteen of whom we find took part in this election. Their position, their high honour, and their unblemished character, are amply sufficient to refute the calumny.

(a) Lord Brougham, Earl Fortescue, George Bishop, Esq., James Booth, Esq., Dr. Boott, the Hon. Richard Denman, Edwin Wilkins Field, Esq., Thomas Field Gibson, Esq., the Baron de Goldsmid, Francis Henry Goldsmid, Esq., Right Hon. Sir James R. G. Graham, Bart., M.P., George Grote, Esq., Robert Hutton, Esq., John Remington Mills, Esq., James W. Mylne, Esq., John Lewis Prevost, Esq., Henry Crabb Robinson, Esq., Edward Romilly, Esq., the Right Hon Sir Edward Ryan, the Right Hon. Edward Strutt, M.P., John Taylor, F.R.S., Henry Warburton, Esq., Fred. John Wood, Esq., John Wood, Esq.

BITTER BEER.

The following Report of Professors Graham and Hofmann on Bitter Beer will be read with interest by our readers. Its result did not at all surprise us. We never, for a moment, suspected that such a man as Mr. Allsopp could be guilty of any kind of falsification, although we are extremely glad that he has come forward in this decided way to clear himself from even the suspicion of being a party to adulteration. We are also prepared to say that, with the accurate details now before us of the expense of strychnine, and of the quantity which is necessary to impart bitterness to beer, we think it extremely unlikely that the report of the falsification with strychnine was based on any sure foundation.

At the same time, we should be glad to see the investigation pushed a little further. The account Messrs. Graham and Hofmann give of M. Payen's opinions, does not exactly accord with that gentleman's original assertion. In the statement given in *L'Union Médicale*, we are unable to find any such expression as "the falsification had no doubt ceased." It also clearly appeared from this statement, that the precautions of the police alone had prevented the fraud from being practised in France; whereas, in England, where checks against adulteration are not provided, it was supposed to have been carried on without molestation. It also does appear, that only ten or twelve years since, M. Pelletier, (M. Payen's informant,) had an order for an "extraordinary amount" of strychnine, which he afterwards learned was exported to England, and intended to "complete the bitterness" of certain kinds of beer. Moreover, we now learn, that Chevallier has hinted at a similar adulteration, in a work published about a year ago in France. How did MM. Pelletier and Chevallier gain their information?

Messrs. Graham and Hofmann must allow that these circumstances are calculated to excite suspicion; and when they state that the charge has been "vaguely made," they might have spared us the reproach, since a charge of the kind could not have been made otherwise. Vague as it may have been, it was our duty to give it publicity, and to endeavour to attract to it the attention of those who were capable of investigating its truth or falsehood. Even now, after the expression of the opinions of these two eminent chemists, and after the facts they have brought forward, we still maintain that the Government will be guilty of the grossest neglect of public duty, if it do not institute a thorough investigation into the whole subject.

There is one expression in the Report to which we most strongly object. Messrs. Graham and Hofmann state, that "it thus appears, that the charge which has been put into the mouth of M. Payen was never made at all by that gentleman, so far as it applies to the present practice of English brewers." This is a most unfair and unhandsome charge against us, which we certainly did not expect from such a quarter. It is also a mis-statement of the facts. We put no charge in M. Payen's mouth; we simply translated what he said; if Messrs. Graham and Hofmann assert, that we have given a false report of M. Payen's lecture, we deny the charge, and challenge them to point out where the error is.

London, April 26th, 1852.

.Report.—Having undertaken, at the request of Mr. Allsopp, an inquiry into the purity of bitter beer, with particular reference to its alleged adulteration by strychnine, we now submit the results which we have obtained upon the subject:—

Strychnine, or strychnia, the alleged substitute for the hop, is a fine crystallizable substance, extracted from nux vomica, and belonging to the class of vegetable principles termed alkaloids, of which quinine from Peruvian bark, and morphine from opium, are

the most familiar examples. These substances, although susceptible of the most valuable medical application in small doses, are, generally speaking, remarkable for their energy as poisons, and for the intense bitterness of their taste,—two properties which are developed in strychnine in the highest degree. Half a grain of the latter substance would poison, and the bitterness of the same minute quantity is perceptible in every drop of six or eight gallons of water in which it is dissolved.

It may be stated at once, that the quantity of strychnine which we find necessary to impart to beer the degree of bitterness possessed by pale ales is, for a gallon of beer, one grain of strychnine, or double the fatal dose. The price of strychnine is about 16s. the the ounce, which does not amount to so much as one penny per grain. Estimating the annual production of pale ale in Burton at 200,000 barrels, the strychnine required as a bitter would, however, amount to 16,418 ounces, and cost 13,158*l.*; while nobody believes that so much as 1000 ounces of strychnine are annually manufactured over the whole world. The bitterness obtained by means of strychnine is equal in degree to that of the hop, but very different in kind, and easily distinguished when the two bitters are compared. The bitter of the hop is immediate in its action upon the palate, is accompanied by a fragrant aroma, and soon passes off; while that of strychnine is not so instantaneous, but, when the impression is once communicated, it is more lasting, and becomes, from its persistence, like that of a metallic salt. The bitter of strychnine is, indeed, easily distinguishable from that of the hop, when deliberately tasted.

Still it would be highly desirable to be able to identify strychnine in beer, by the actual extraction of the substance, and the application to it of a chemical test of absolute certainty. Fortunately, those poisons which have the most violent action upon the animal economy, possess often also the best marked re-actions, or their physiological and chemical properties are equally salient. Thus, arsenic and hydrocyanic acid are the most easily detected of chemical substances; and strychnine proves to be not far behind them in this respect.

A quantity of strychnine, not exceeding one one thousandth part of a grain, is tested and recognised to be strychnine in the following manner:—The powder is moistened with a single drop of undiluted sulphuric acid, and a small fragment of chromate of potass placed in the liquid. A beautiful and most intense violet tint immediately appears at the points of contact, and is speedily diffused over the whole liquid. Although most intense, the colour disappears entirely again in a few minutes. The admixture of the smallest quantity of organic matter, however, interferes with the success of the process. In order to apply the test, in operating upon a complex liquid like beer, the strychnine must first be extracted from the liquid and obtained in a pure or nearly pure condition. This difficulty, which appears at first considerable, may be readily surmounted, and the strychnine, if it really exists in beer, be separated, and its nature established in the most certain manner.

For this purpose, two ounces of ivory-black, or animal charcoal, were shaken in half a gallon of beer to which half a grain of strychnine had been purposely added. After standing over night, the liquid was found to be nearly deprived of all bitterness, the strychnine being absorbed by the charcoal. The liquid was now passed through a paper-filter, upon which the charcoal containing the strychnine was collected and drained.

The next step was to separate the strychnine from the charcoal. This was readily effected by boiling the mixture for half an hour in eight ounces of ordinary spirits of wine, avoiding loss of alcohol by evaporation. The spirits, which now contained the strychnine, were next filtered, and afterwards submitted to distillation. A watery fluid remained behind, holding the strychnine in solution, but not sufficiently pure for the test. The final purification was accomplished by adding a few drops of potass to the watery fluid, and then shaking it with an ounce of ether. A portion of the ethereal solution evaporated upon a watch-glass, left a whitish solid matter of intense bitterness, and this was recognised to be strychnine, by giving the violet tint previously described, upon the application to it of sulphuric acid and chromate of potash.

Having satisfied ourselves by repeated experiments with samples of beer to which strychnine had been previously added, of the never-failing efficiency of the above method of extraction, we now proceeded to the actual examination of the commercial article. With this object, a series of samples were taken indiscriminately from the stores of a considerable number of the London bottlers who supply the public with Allsopp's pale ale. We mention the beer of the following firms, whose goods were severally examined by the processes which we have above described, and from whom we have documents in hand proving the origin of the beer, and the date of its arrival at their stores from Messrs. Allsopp's brewery:—

*C. Barron and Co., 19, Pall-mall.
Barker and Blewett, 211, Sloane-street.
G. and M. Blockey, Duke-street, St. James's.
John Blockey, 104, Ebery-street, Pimlico.
*C. H. Bowen, 101, Fenchurch-street.
*R. B. Byass, Langbourne-chambers, Fenchurch-street.
Child and Co., Leicester-square.
L. Clow, Princes-street, Fitzroy-square.
Crimp and Ward, Old Broad-street.
Daukes and Rodick, Exeter-hall Vaults, Strand.
Nath. Easty, 138, Upper Thames-street.
*Findlater, Mackie, and Co., 1, Upper Wellington-st., Covent-garden.
M. B. Foster and Son, 56, Brook-street, Bond-street.
Friend and Co., Abchurch-lane.
George Jones, 8, Billiter-street.
E. and G. Hibbert, 7, Jewry-gardens, Aldgate.
W. G. Hollebone, 1, Lower Eaton street.
W. Mabey, Lloyd's Coffee-house, Royal Exchange.
J. Macdonald, 9½, Queenhithe, Upper Thames-street.
*Moline, Harper, and Moline, London-bridge.
Nisbet, 11, Jermyn-street.
Padget and Son, Pantechnicon.
Rose, Brothers, 257, Oxford-street.
A. Suter, 65, Fenchurch-street.
J. Wallis and Co., Milbank-street, Westminster.
White and Price, Mark-lane.

It may be stated that, with the exception of the five varieties marked with an asterisk, the casks from which these samples were taken had all been received in London before the 20th of March, *i.e.*, the period the possible use of strychnine in the manufacture of bitter beer was first brought before the English public.

Not one of these varieties of beer, when tested with the greatest scrupulousness, gave the slightest evidence of the presence of strychnine.

The charge of adulteration of beer by strychnine has been proposed in a manner so vague, that it is difficult to fix it, and try its validity. The existence of the adulteration is not alleged in any particular sample of beer, nor the practice ascribed to any individual brewer or dealer. An English journalist adopts the charge upon the report that such an opinion is entertained and expressed by a French chemist of distinction, M. Payen, in his public lectures at Paris. From this gentleman we have since obtained explanations which define more closely the kind of charge which was actually made by him. The late M. Pelletier, the well-known manufacturer of organic products in France, had received, at one time, an order for an extraordinary quantity of strychnine, of which the destination was at first unknown to him; but which he afterwards learned had been entirely exported to England, and used, as he informed M. Payen, to complete the bitter of certain kinds of beer.

We have reason to know, although it is not stated by M. Payen, that these remarks of Pelletier refer to a period of ten or twelve years past; and further, although not informed of the amount of the order, we have good authority to state, that fifty or a hundred ounces would have been considered a large order for strychnine at that time. The calculation already given, shows how utterly insignificant such a supply of strychnine would be for its imagined application in the pale ale breweries. It is likewise known that the manufacture of strychnine has not been on the increase in France of late years.

M. Payen excuses his statements on the ground, that similar suspicions are conveyed in a French work, on "Alterations and Falsifications," by Chevallier, published nearly a year ago, but which have not hitherto received any formal contradiction in England. Notwithstanding the latter circumstance, our distinguished correspondent concludes by expressing his regret that he ever said "that the fraud appeared to have been practised," although he had added the remark at the time, "that this falsification had no doubt ceased."

It thus appears, that the charge which has been put into the mouth of M. Payen, was never made at all by that gentleman, so far as it applies to the present practice of English brewers; and with reference to anterior times, that the charge reposes simply and exclusively upon the privately expressed opinion of a deceased chemist, the grounds of which are entirely unknown to the world, and must ever remain so.

The sifting nature of the chemical examination which the beers of Messrs. Allsopp's manufacture for many months past have been subjected to, fully establish their incontestible purity. Indeed, no one who has witnessed, as we have done, the open manner and

gigantic scale in which the operations are conducted in their establishment, could entertain the idea for a moment that any practice involving concealment was possible. But even in the absence of all such scrutiny, the idea of strychnine being mixed with beer anywhere, or in any circumstances, involves an amount of improbability which might well dispel all suspicion on the subject.

There is an Act of Henry VII. which prohibits the *adulteration* of ale by brimstone or *hops*. The place of the hop was then supplied by sage, horehound, chamomile, and other indigenous bitter plants. Since that period, the character of the national beverage must have undergone a silent revolution, for all varieties of beer, both pale and brown, now owe their distinctive properties to the hops which are boiled in the malt infusion, and fermented along with it, as completely as wine owes its peculiar character to the grape. Substitute any other bitter for the hop, and fermented wort would no longer be recognised as beer.

Were mere bitters all that is required, it would be easy to prove that the extract of quassia would supply a bitter which is perfectly harmless and agreeable, and infinitely less expensive than strychnine.

But the process of brewing pale ale is one in which nothing but water and the best malt, and hops of the first quality, are used, and is an operation of the greatest delicacy and care, which would be entirely ruined by any tampering with the materials employed. Strychnine could not fail to be rejected, from the ungrateful, metallic character of its bitterness, independent of all objections of a more serious kind. This peculiarity of taste is also calculated to betray its presence. Small, too, as the proportion of strychnine may be, which is necessary to impart the degree of bitterness of pale ale, the quantity rises, as has been seen, to a poisonous dose in half a gallon of the fluid; and as this poison is one of those which are known to accumulate in the system, its poisonous action would inevitably follow, in occasional cases, upon the consumption of much smaller portions of beer when continued for many days without intermission. The violent tetanic symptoms of poisoning by strychnine are also such as could scarcely fail to excite suspicion and alarm. Add to these disadvantages, the certainty of the means of detecting strychnine in beer by the chemical tests described above, which any medical man or practical chemist can apply, and the chance of the use of so dangerous a substance for any purpose of adulteration, becomes in the last degree improbable.

Thomas Graham, F.R.S.,
Professor of Chemistry, University College, London.
A. W. Hofmann, Ph.D., F.R.S.,
Professor of the Royal College of Chemistry, London.
Henry Allsopp, Esq.,
Brewery, Burton-on-Trent.

THE LATE MR. DALRYMPLE.

[From a Correspondent.]

It is with profound regret that we announce the decease of Mr. John Dalrymple, of Grosvenor-street, at a quarter before ten on Sunday, the 2nd instant,—a regret in which all who know his worth will readily sympathise. Like his eminent predecessor, Frederick Tyrrell, he has been cut off in the flower of his age and the height of his usefulness, just when reaping the reward of his long and meritorious labours in the field of ophthalmic science. He has passed away from us at the very time that his ripe judgment and extensive experience rendered his opinion of the highest value. When a man reaches threescore and ten, or fourscore, his faculties usually decay, and his work is done; but far different is it when, as in the present instance, a professional man is struck down in the very prime and vigour of his days. That is indeed a heavy loss; and what Mr. Dalrymple had done, proves what might have been expected of him had his life been spared to the full age of mankind.

A warm and uninterrupted friendship of more than twelve years enables the writer to bear testimony to the worth of his departed friend. In him, simple, unassuming manners and upright conduct were combined with great clearness of perception, and remarkable tact in diagnosing the points of a case, and its appropriate treatment. He was eminently cautious, very chary of resorting to operations in doubtful cases, and although not strictly a brilliant operator, was equally careful and successful.

Mr. Dalrymple was an able microscopist, and contributed some valuable papers to the Royal Society; but his *magnum opus* was his noble work on the pathology of the eye, which will be an enduring monument to his fame.

The social disposition, honourable feelings, kindliness of heart, and many estimable qualities of John Dalrymple, combined with his extensive information, will endear his memory, as it endeared the man, to a large circle of friends: and to no one more than to him who pens this tribute of regard. It will be satisfactory to the Profession to know, that the concluding part of Mr. Dalrymple's great work on the Pathology of the Human Eye is in print, and only waits the colourer, for publication. W. W. C.

REVIEWS.

Researches into the Pathology and Treatment of Deformities in the Human Body. By John Bishop, F.R.S., Member of the Council of the Royal College of Surgeons of England, etc. Pp. 266. London: Highley and Son. 1852.

Lateral Curvature of the Spine; its Causes, Nature, and Treatment. By R. W. Tamplin, F.R.C.S. Eng.; Surgeon to and Lecturer on Deformities at the Royal Orthopædic Hospital, etc., etc. Pp. 44. London: John Churchill. 1852.

These two volumes are written with widely different objects. The first is a philosophical disquisition on the causes and principles of treatment of deformities; the second, a slight sketch of the causes, the symptoms, and of the treatment of lateral curvature of the spine, adopted by the author. The former is addressed to the members of the Medical Profession alone, and requires attentive study and reflection; the latter is adapted for, and addressed rather to the friends of those afflicted with lateral curvature than to the Profession, although certain principles of the pathology of spinal curvature are enunciated in its pages.

Commencing with some remarks on the present condition of surgery in relation to deformities, Mr. Bishop passes first in review, "the transition from the normal states of many structures; such as those of the bones, the joints, the ligaments, and the muscles, as likewise the constitutional, chemical, and mechanical actions involved in those changes." The parts of the osseous system concerned in the production of deformities are more especially those which transmit the weight of the head and other parts to the ground. The density, elasticity, and other mechanical properties of the osseous tissue are admirably adapted for the purposes to which bone is applied, and any considerable variation in those qualities, or the chemical composition of bone, especially the changes by which its elasticity is diminished, materially assist in the production of many deformities. The arrangement of the osseous matter so as to produce the greatest amount of resistance, and the causes of mollities and fragilitas ossium are discussed in this chapter.

One of the most, if not the most important division of the work is that on the vertebral column. In this chapter the construction, the natural curves,—the mode of production, and the value of these curves,—the capability of resistance to super-incumbent pressure,—the flexibility and elasticity of the entire column,—the ligaments of the spine, and the effects of equal and unequal pressure on the inter-vertebral substance are discussed. It has been stated by physiological writers of great repute, the illustrious Magendie among the number, that the normal triple curve of the spinal column conduces so much to its power of resisting super-incumbent weight, that the spine is sixteen times stronger than if it were straight. Mr. Bishop successfully combats this opinion, and demonstrates the error on which it is founded. The calculations on which such enormous increase of resistance is based, evidently depends on the resistance to vertical pressure of a straight elastic spring. But the spine is originally curved, and any forces applied to its extremities will necessarily increase the curve in a similar proportion that the force, acting on an originally straight

spring, produces certain curves in its axis. "So far, then," says Mr. Bishop, "from being stronger in consequence of being originally bent into several curves, the spine is, in fact, much weaker; and the greater the radius of curvature at any point of the axis, the less will be the strength." And "the advantage of the curved form is, that the shocks and jars applied at either end of the spine tend to bend the axis, which would, if straight, crush some of the vertebræ in consequence of the force acting on them in a perpendicular direction." In the section on the ligaments of the spine, we have the important observation, that while in robust persons the ligaments are endowed with considerable elasticity, in the weak and relaxed habit of body, both the strength and elasticity are much impaired, elongating on the application of a smaller force, and returning with less energy to their natural condition after the removal of the extending force. The compressibility of the inter-vertebral fibro-cartilages, and the time required to restore them to their pristine condition after long-continued pressure produced by the erect position of the body for many consecutive hours, is greater than is commonly supposed, and the restoration by the recumbent position occupies several hours. The compression produced by the erect position of an adult during the entire day amounts to an inch or about one-fourth of the entire natural depth of the inter-vertebral cartilages. As the natural curves of the spine are produced by the unequal thickness of the bodies of the vertebræ and the inter-vertebral cartilages, all abnormal changes in the figure of the spine must result from some change in the figure of these parts; and as the inter-vertebral substance is subjected to equal pressure when in the erect position, it follows that the constant maintenance or too frequent repetition of other than the erect position will affect the figure of the spine, and tend to produce curvature.

"Hence," says our author, "it is obvious, that, whenever the spine is curved in any one direction, some portion of the inter-vertebral substance bears a larger proportion of the whole compressing force of the superincumbent organs than the rest; and, if such unequal distribution of the force be long maintained, it must tend to derange the functions. We have seen, that when the inter-vertebral cartilages have been subjected to continued pressure, they do not instantaneously recover their primitive condition. From this it may be readily inferred, that, if the surface of the cartilages has been unequally acted on by a force applied day after day for some time, it will become so much compressed in one part, and expanded in the opposite, as to assume a new figure, adapted to the abnormal attitude which gave rise to its unequal compression. In fact, it becomes diseased by the influence of simple mechanical compression, independently of other causes. The inter-vertebral cartilages having thus been made to assume a new figure, occasion deformity of the spine, and are, indeed, in all probability, the usual seat of lateral distortion when it is merely of a mechanical character."

The mischief produced by this abnormal direction of the pressure is not confined to the inter-vertebral substance, but extends to the vertebræ. Mr. Bishop is of opinion, that the persons most subject to distortions of the spine are those whose bones contain less than the normal proportion of earthy material.

In the third chapter, after a general disquisition on the physiological actions of muscles, the author discusses the question of myotomy and tenotomy. He is decidedly opposed to these operations, because, when once the passive elongation of a muscle is lost by removing the resistance in cutting across the tendon, it never recovers its original length, and loses much of its force. He says:—"Now, as the muscles, after their division, become shortened, and have no power to elongate themselves, their union must take place by the production of new matter, which fills up the interval between the divided parts. By this means, muscles are lengthened without being stretched, and do not acquire the tonicity and extension of their normal state, and hence their loss of power." He draws the conclusion, that myotomy for lateral curvature is not justifiable on any rational or practical ground, and that tenotomy is followed by such debility, from loss of tonicity of the muscles, as to be positively injurious. The only cases in which these operations are, in his opinion, admissible, are strabismus and torticollies.

A large portion of the body of the book is necessarily occupied with the mechanical causes of distortion. In this part the effects of different occupations which cause the workman to assume certain unnatural positions are fully discussed. Among the causes of distortion the carrying of weights on the head, the back, in front of the body, or on one side, also the positions demanded by the use of a wooden leg after amputation of one of the lower extremities. Other causes of distortion are enumerated, among which are the use of crutches, anchylosis of the knee or hip-joint; unequal length of the legs, lying and sitting in unfavourable positions, and rowing, all of which are viewed by the Author as tending to turn the spine from its proper curves. Of these causes of lateral curvature of the spine, the unequal length of the legs is perhaps the most important, and the most easily overlooked. When one leg is shorter than the other, either in consequence of some congenital deficiency of development, or from rachitic curve, it is evident that in standing or walking, the body must be more or less thrown over to the opposite side. The Author remarks, that when this shortening of one of the lower limbs exists, "the effect on the trunk is similar to that which occurs when one limb becomes shorter than the other, owing to disease of the hip-joint or otherwise; and it is gratifying to find that the trunk, after having been so distorted, will resume its normal figure when the leg has become straight, or is rendered of equal length with the opposite limb." The mechanical effects of lateral or posterior curvature of the spine on the motion of the ribs, their relative position and the results of those changes of position on the thoracic and abdominal viscera are carefully described.

Passing over a long, interesting, and important discussion of the deformities of the lower extremities, in which much valuable matter and many novel views are contained and enunciated, simply from want of space, we arrive at the ninth chapter, on the pathology and morbid anatomy of deformities.

The morbid anatomy of spinal curvature unattended by caries is, in its early stages, almost unknown. Great contrariety of opinion on this subject subsists. Some affirm that the disease is in the ligaments, the fibro-cartilages, or the vertebræ; while Mr. Bishop is of opinion that these changes are secondary, resulting from frequently-repeated, long-continued malpositions of the body.

The changes in the vertebral column from caries, mollities ossium, rickets, etc., are elaborately described, and several illustrations from marked and interesting cases are given. The most singular of these is a case of hypertrophy and ossification of the inter-vertebral substances, giving rise to a convexity forwards. This chapter closes with an account of the malignant diseases of bones; and, after devoting some pages to the subject of rickets, the author passes on to the discussion of the methods of alleviation and cure of the deformities he has described.

It is evident, from the state of the vertebral column in old and confirmed cases of ordinary lateral curvature not the result of caries or malignant disease, that a cure is utterly hopeless. Consequently, it is of the greatest importance that early attention should be paid to every case, and such means adopted as are most capable of obviating the cause of the deformity. The adaptation of the means to be employed must, in Mr. Bishop's opinion, depend on a familiarity with animal mechanics.

"Whoever," says he, "undertakes to cure distortions, should be perfectly conversant, not only with the structure of the human frame, but also with the bearing of each part of it on every other; for it is not enough to bring in aid the extraneous force of an instrument to remedy a distortion, however well qualified it may be to correct the particular evil, without having the certainty that its use will give rise to no other derangement of the system; and this can only be known from a careful investigation into its relative effects on the several parts of the body considered as a complicated machine—a problem which generally does not admit of an easy solution."

The methods of treatment now in use are classified under three heads:—those designed to stretch the body either in a horizontal or vertical position; those which tend to prop the body or limbs, and the recumbent position—either prone or supine. The author enters very fully into the discussion of the relative value of each of these methods, their uses and abuses. Our limits compel us to confine ourselves to the following extracts, as embodying the grounds of the author's idea of the treatment of simple lateral curvature in its early stage:—

"Unless, indeed, there be disease of the bones of the spine, the

origin of ordinary cases of lateral curvature is rarely found in the spine itself, but is produced by extraneous force; for the bones, muscles, ligaments, and cartilages, are all in a state of uniform action on each side of the mesial plane of the body, and the tendency of the spine to bend must necessarily be in that place."

and—

"The direction and position of the surface of the sacro-lumbar articulation may be varied by the length and disposition of the legs; if one leg be shorter than the other, the articulation will be inclined in standing towards the side of the shorter leg; the same thing occurs when one leg is flexed at any joint while the other is extended."

and—

"The progress of lateral curvature, not originating from organic disease, may be divided into three stages. The first comprehends those cases where the curvature depends upon attitude, or the presence of extraneous force, without having produced any altered figure of the vertebræ or absorption of inter-vertebral cartilage. The second comprises those cases in which the curvature results from a slightly-altered figure of the vertebræ and cartilages in very young and growing persons, the bones not being yet sufficiently hardened with their due proportion of earthy constituents, and when the curvature is produced by extraneous forces. The third embraces cases of long duration, in which the vertebræ have assumed an altered figure, and have become hardened by an increased supply of earthy constituents. The persons are of a more advanced age, and the body has acquired a position of equilibrium corresponding to the distortion of the spine. The great objects to be kept in view by those who have the management of children are, to see that none of those causes which produce ordinary lateral curvature be suffered to act, and to attend to the physical condition of the body in the earlier stages of developement."

In the foregoing analysis we have confined our remarks to the principles on which the treatment recommended by the author is founded. Mr. Bishop has done good service to the Profession in the publication of his work.

Mr. Tamplin's essay is, as we have already said, a simple exposition of the principles by which the author is guided in his treatment of lateral curvature. Mr. Tamplin is of opinion, that "the immediate cause of deformity (lateral curvature) in all cases is purely mechanical, namely, the superincumbent weight of the head and upper extremities, combined with an instinctive effort, always in operation, to retain the head in a perpendicular position with the sacrum, with inability of the muscles and ligaments to accomplish this object when once a permanent curvature has taken place."

The author takes a similar view of the result of deformities of the lower extremities in producing lateral curvature, which arises, according to him, from the following circumstances:—

"1st. From any cause by which the movements of the lower extremities are rendered irregular; in other words, where the uniformity of their action is destroyed.

"2nd. From general debility, or simple loss of tone of the system; from general debility consequent upon or combined with true rachitis, with its attendant and unhealthy state of the constitution.

"3rd. From any occupation by which the muscles of one side, or of one extremity, are more frequently exercised than those of the opposite side."

In the description of the pathology of lateral curvature, we have the remark, that

"The intervertebral substance, from the continued and undue pressure to which it is subjected on the concavity of the curve, becomes at first compressed, and eventually, in the most severe cases of many years' standing, absorbed; while the ligaments are elongated on the convex side, and contracted on the concave side, offering the most obstinate resistance."

Mr. Tamplin is of opinion, that

"In those cases in which the curve is slight though permanent, even when of some years' duration, as a rule it admits of being perfectly cured; and the basis, if not the whole, of the treatment is the taking off the superincumbent weight of the head and upper extremities by mechanical support, by instruments of his own invention, and, if necessary, invigorating the system by appropriate internal medicines."

He objects to the use of the exercises recommended by other practitioners, on the score that such exercise will cause an increase of power in the muscles which will in turn increase the deformity.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

PARTURITION AMONG THE ESQUIMAUX.

At a recent meeting of the Obstetrical Society, Dr. James Struthers exhibited the pelvis of a female Esquimaux, which was chiefly remarkable for the unusually large dimensions of the brim, cavity, and outlet, allowing the largest fœtal head to pass with great ease in almost any direction. The following are the diameters of the brim:—Transverse, 6 inches; conjugate, $4\frac{5}{8}$ inches; oblique, $5\frac{3}{8}$ inches. Of the cavity:—Transverse, $5\frac{3}{8}$ inches; conjugate, $5\frac{3}{8}$ inches; oblique, $5\frac{3}{8}$ inches. The transverse diameter of the outlet was $5\frac{1}{8}$ inches; and the pubic arch was unusually wide.

Dr. Struthers received the pelvis from Mr. G. C. Pirie, who found it last summer under a cairn of stones, the common mode of burying among the Esquimaux,) near Cape Hooper, in Davies' Straits. It is an interesting fact, (of which Mr. Pirie satisfied himself, thereby confirming the statements of various writers on Greenland,) that the Esquimaux women have much safer and more rapid labours than the women of this country. There the whole process of parturition is left in the most absolute manner to nature. As soon as the woman begins to complain, she retires to a low skin hut, built for the purpose, into which no one is allowed on any account to accompany her. Before the lapse of an hour, she generally makes her appearance with the baby on her back. Not unfrequently labour comes on unexpectedly. Such a case came under Mr. Pirie's own observation. The woman left the ship, retired behind a block of ice, and came back within half an hour with the child in her hood. It is stated that the cord is not divided until the placenta has come away, and that the division is effected by the teeth of the mother. Miscarriages, twins, and monsters are of rare occurrence, and it is a very uncommon thing for a woman to die in childbed.

EXHIBITION OF QUININE IN TYPHUS AND TYPHOID FEVERS.

On this subject, Professor Bennett read a paper to the Medico-Chirurgical Society, on Wednesday evening. It appeared, that about the month of November last, Professors Benuett and Christison had received communications from Dr. Dundas, of Liverpool, mentioning the beneficial results he had found to follow the exhibition of quinine in the continued fevers of warm climates. So strong were the representations of Dr. Dundas, that Professor Bennett, whose period of clinical duty in the Infirmary had at that time just commenced, determined to give the remedy a fair trial. The doses Dr. Dundas recommended were ten grains every second hour. Dr. Bennett had given quinine in seven out of fourteen cases of typhus or typhoid fever admitted into the Royal Infirmary during the period from November to the end of February. In all seven the physiological effects of the remedy had been produced. In most of the cases, the seventh was the day of the disease on which the treatment of quinine was begun, in some it was later; one patient, however, had it on the sixth day, and none later than the tenth. In one case, 205 grains of quinine had been taken in eighteen doses. In five others about 80 grains had been taken. Dr. Bennett had in none of these instances found the quinine to cut short the disease, or in any way favourably to influence its progress. In one case convalescence had been delayed till the forty-second day. At the same time, Dr. Bennett, thought it proper, in bringing the subject before the Society, to mention, that the experience of some other physicians had been more favourable. Dr. Graves, of Dublin, for example, had written to Dr. Dundas to that effect, and so had Dr. Kelly, of Drogheda, who had treated eight cases with the happiest results. Professor Christison's experience had as yet been limited to one case, that of a girl who had contracted typhoid fever in the hospital when recovering from another disease. In it the employment of the remedy had certainly produced no favourable effect,—it was now the forty-second day, and no marked convalescence had commenced. He regarded Dr. Bennett's experiments as of additional value from having been made *coram publico*, in the presence of a large number of intelligent students, many of whom had been from time to time examined on the very cases themselves. Important as the inquiry was, he much feared that the discovery of quinine as an antidote in continued fever would prove of but little avail, unless the additional discovery of new cinchona forests was also made.

Dr. William Robertson had also administered the quinine in some cases, in none with benefit. He had in two cases observed very alarming symptoms to follow its exhibition, a state of almost complete coma having been induced.

Dr. Maclagan had recently learned from his son, Dr. Philip Maclagan, of the 20th Regiment, at present in Montreal, that good effects had followed the administration of quinine in the form of continued fever lately prevalent there.

Dr. Begbie had had no experience of quinine in continued fever; but in the remittent fevers of children he had long employed it with marked benefit. In such cases, he was in the habit of prescribing quinine, while the tongue was foul and the skin hot, and without even the use of a purgative. He frequently found the quinine to arrest in four or five days this form of fever, which generally continued for ten or twelve, and often for a much longer period.

PROFESSOR BALFOUR'S *ELEMENTS* OF BOTANY *versus* PROFESSOR BALFOUR'S *MANUAL* OF BOTANY.

While Messrs. Adam and Charles Black are busily advertising the former work, Messrs. Griffin and Co. are, with even greater energy, calling the attention of the lovers of botanical pursuits, and especially students, to the same Professor's Manual. We can imagine a student being very much difficulted as to whether he should purchase the Elements or the Manual. The former is certainly the newer work; but who can entertain a doubt as to the excellence of the latter, after reading the following advertisement, which appeared in Wednesday's *Scotsman?*—

"Professor Balfour's Text-book of Botany. A Manual of Botany: being an Introduction to the Study of the Structure, Physiology, and Classification of Plants. By John Hutton Balfour, M.D., F.L.S., F.R.S.E., Professor of Medicine and Botany in the University of Edinburgh. Second Edition, 670 pages, with 833 Wood-engravings. Price 12s. 6d. 'All my pupils want it.'—*Professor Balfour.* 'All my pupils are waiting for it.'—*Professor Balfour.* 'I must have the book complete for my pupils in spring.'—*Professor Balfour.* 'The most masterly digest of the science which has yet appeared.'—*Witness.* 'Beyond all comparison the best introduction to the most delightful of all sciences.'—*North British Mail.* 'Remarkable for comprehensiveness and cheapness.'—*Scottish Guardian.* 'Very complete.'—*Atlas.* 'A mass of valuable and interesting information.'—*Weekly News.* 'Admirably arranged.'—*Bentley's Magazine.* 'The model manual of botany.'—*Tait's Magazine.* Griffin and Co., London and Glasgow."

Can it be, then, that Dr. Balfour really wishes his students to provide themselves with the manual of the Messrs. Griffin? or is it not more probable that the Messrs. Griffin are only laudably anxious to get rid of the book their enemy has written, and for that purpose are advertising right and left.

We had thought that the little dispute between the botanical Professor and his former publishers had been got over. We do not remember ever to have read of any peculiar severity attending the bite of that fabulous creature the *griffin*; but we suspect that Professor Belfour, must feel rather sore on that point—so we dismiss it.

GENERAL CORRESPONDENCE.

OF THE TREATMENT OF NÆVUS.

[To the Editor of the Medical Times and Gazette.]

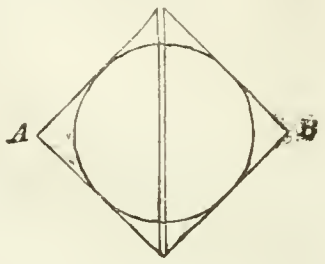
SIR,—Subcutaneous vascular tumour, or nævus, is variously treated by extirpation, compression, destruction through chemical agents, and ligature; each of which means is applicable according to the size, situation, and individuality or peculiarity of the growth; and perhaps of these the subcutaneous ligature is that most generally admissible.

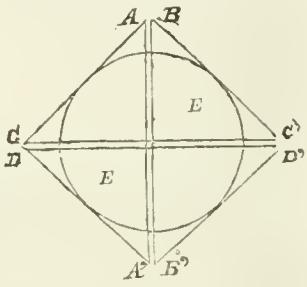
When the skin is not implicated in the disease, it is unnecessary that it should be included in the ligature; the operation is then comparatively painless, and an ugly cicatrix is avoided. But when the nævus is situated upon the eyelid, or immediately beneath the lower lid, it is imperative not to include the integument in the ligature if it may possibly be avoided.

I have several times had occasion to use the subcutaneous ligature, and have never had cause to regret that the skin was not also included.

An operation of this kind was lately performed at St. Mary's Hospital, and Mr. Lane remarked, that it was necessary to repeat the operation, it having been done a few weeks previously, but without effect. Mr. Lane then explained, that he had allowed the ligature to remain forty-eight hours only; that suppuration had been established, but no slough formed; and that he doubted the sufficiency of the subcutaneous ligature, the skin remaining to supply nutrition to the nævus.

I will briefly relate the manner in which I passed the ligature in the cases which were treated subcutaneously. With a curved needle, a strong double ligature was carried well under the base of the tumour and out at the corresponding point on the opposite side. The loop of the silk was cut through, and the armed needle again passed subcutaneously, to correspond to one quarter of the tumour; the other end of the ligature was then carried in a similar manner to pass out at the same aperture. The same being done on the opposite side, and the ligatures knotted at *A* and *B*, each half of the nævus was surrounded by its own ligature. Or, the tumour being large, it will be requisite to use four, instead of two ligatures. Two double ligatures being passed at a right angle through the base of the tumour will form four ligatures on cutting through the loops of the silk, and the base will at the same time be partitioned equally. If one of the extremities of each ligature be now passed subcutaneously around one quarter of the nævus and knotted, each quarter will be included in a separate ligature, but the whole tumour will be constricted only on tying the last knot. For instance, *A B*, *C D* are double ligatures, passed through the base of the tumour *E*. Let *A* be carried subcutaneously, and knotted at *C*, *A'* with *D'* and *B'* with *D'*; but strangulation of the tumour will alone be produced on tying *B C'*. The four ligatures are now intimately connected to form but one, and they will be drawn away as a single ligature, on slightly enlarging the opening at one of the knots, and at the same time the slough will escape.





The operation to which I have already alluded was, in effect, merely compression, extended to forty-eight hours; which was sufficient only, as the case proved, to set up an inadequate amount of inflammation for the closure of the vessels. The ligature being removed, blood was again forced into its old channels, and the slough was therefore prevented. When the skin does not partake of the disease, I have never found these subcutaneous ligatures to fail, if allowed to remain long enough for the slough to form.

I am, &c. B. E. BRODHURST,
Assistant-Surgeon to the Royal Orthopædic Hospital.

14, Brook-street, Grosvenor-square.

ON THE ADMINISTRATION OF CHLOROFORM.

[To the Editor of the Medical Times and Gazette.]

SIR,—The experience I have had in the administration of chloroform for many of my professional friends, the surgeons of this large and important town, will, I hope, justify the few practical remarks I am about to make on what appears to me the proper way of employing it; and I am induced the more to do so from your Leading Article in the *Medical Times and Gazette* of April 3. I quite agree with you, that it is a strange scene to behold "a patient laid upon an operating table, a large piece of folded lint sufficient to cover nearly the entire face, and soaked in chloroform, is laid upon the mouth and nose; as the lint dries, fresh chloroform is added. The inhalation may go on five, fifteen, or thirty minutes. There may be used one drachm, or one ounce of chloroform." If this be the ordinary method in London, no wonder that the blood is poisoned, that it remains fluid and without coagulation, and of a "brownish-purple hue." I have, as yet, given chloroform with perfect success, and without cause for apprehending danger in a great many cases; I have given it for one gentleman no less than twelve times the last eighteen months, in cases of lithotomy; the patients aged from eighteen months to sixty-three years, and every patient is, happily, at this moment, alive and well (a); but I have frequently been asked to give it,

(a) These cases will be published: Mr. S. Parker, the operator, having promised me his notes of them.

when, after a careful examination of the heart and lungs, I have declined to do so, and the operation has been performed without it; and I cannot refrain from repeating the words of one of the experienced surgeons to the Sheffield Infirmary, when giving chloroform for him, in a case in which he was about to remove the breast, "that the operation was sufficient to engage the attention of the surgeon, and that the chloroform ought to be left to the physician only." I confess, in the great majority of cases, I never have it in my power to see the steps of the operation, (the eye should be fixed on the face of the patient, and the finger should never be removed from the pulse,) and to leave the administration of chloroform to a young, inexperienced pupil, "anxious to learn surgery," displays a want of caution that cannot be too much lamented.

The proper way to administer chloroform is very simple: no apparatus of any kind to be kept "in good order" is required; a pocket-handkerchief made hollow in the centre to prevent the liquid coming into contact with the lips and making them sore, is the "instrument" I always use; a bit of lint is placed in the centre, on which 30 drops of chloroform are thrown, increased *pro re nata*. After keeping the handkerchief to the nose for, say, half a minute, it is removed, and the patient permitted to breathe fresh air; the chloroform is again applied, care being taken, from time to time, to give fresh air, and to keep the face sponged with cold water,—a basin of which I always have placed within reach. By this plan, —by giving the chloroform at first gradually, taking care that fresh air is given again and again, that no disease of the heart or lungs exists, and that the chloroform is fresh and pure,—I honestly think the remedy may be used with perfect safety. I have kept a patient in a state of insensibility more than half an hour, and I am certain, at least twenty surgeons in this town can testify, that at all ages, and for almost every kind of operation, chloroform has been given by me with the result of rendering the operation painless, and that, too, without danger to the patient. The chloroform I have used has been obtained from Edinburgh.—I am, &c.

Sheffield. J. C. Hall.

ALBUMEN AND ARSENIC.

[To the Editor of the Medical Times and Gazette.]

Sir,—Some letters have lately appeared in several journals from Dr. Sheridan Muspratt, of Liverpool, and T. J. Herapath, of Bristol, on this subject, impugning the accuracy of the statements and experiments of Mr. Edwards, as described in the "Transactions" of the Chemical Society, and characterising them as absurd, etc.

These gentlemen have, in my opinion, drawn a hasty conclusion; and I might further observe, that their own experiments have not been properly instituted, if they wished to establish the efficacy of albumen as an antidote to arsenic. The making of experiments in the laboratory by boiling up the articles is not, I contend, sufficient proof, inasmuch as they will not apply to the human stomach.

The following experiments, which seem to me the more rational, will show exactly how the matter stands:—

Experiment 1.—Took three grains of arsenious acid, dissolved in sufficient quantity of distilled water; put it into a phial along with one fluid ounce of ovalbumen; shook them incessantly for fifteen minutes, diluted with water filtered; and, on adding a drop or two of hydro-sulphuret of ammonia, and then a little muriatic acid, an abundance of the yellow sesquisulphuret, or tersulphide of arsenic, was produced.

Experiment 2.—Repeated the above, but allowed it to stand for two hours, shaking at intervals; on testing again, arsenic in abundance was evident.

Now, it is impossible to mistake this precipitate for free sulphur from the hydrosulphuret, as a simple mixture of albumen and water only showed no such change.

These two experiments speak for themselves; and it must be admitted that no reliance can be placed on the use of albumen as an antidote any more than on hydrated peroxide of iron, since, if it combines with arsenic, as Baron Liebig and his supporters have stated, to form an insoluble coagulate, it ought to do so immediately, or at least within a reasonable time, else it is worthless; neither is the coagulate that is formed wholly insoluble, as on boiling I have detected arsenic in the filtered liquor.

Hydrated peroxide of iron will, I know, if shaken up in sufficient quantity with a clear solution of arsenic, abstract that body immediately and entirely; but, on the other hand, as Professor Taylor has shown, if you mix the arsenic undissolved with the iron and water, it fails, whether it be kept in contact with it for an hour, day, or week. In cases of criminal poisoning, the arsenic is seldom or never in such a soluble form as can be made by the chemist; hence the difficulty to contend with, and the little reliance to be placed on any antidote, however good in other respects.

Dr. S. Muspratt also states, that this coagulate compound is not poisonous, which the concluding experiment of Mr. Herapath totally refutes, as the administration of a portion to a cat terminated fatally. What can be more convincing proof than this of its inefficacy as an antidote? I am, &c.

John Horsley,
Operative and Analytical Chemist.

The Laboratory, Cheltenham.

THE CHARTER OF THE COLLEGE OF PHYSICIANS.

[To the Editor of the Medical Times and Gazette.]

Sir,—As it is of obvious importance, that every graduate in medicine concerned in the Charter now in contemplation by the College of Physicians, should rightly comprehend to what extent it is likely to affect his professional position, I have no scruple in asking for an early opportunity in your Journal, of directing particular attention to that clause which provides for the admission of candidates without examination.

Draft Charter, sect. 5, "Every person practising as physician in England and Wales, who shall have taken the degree of M.D. at any University of the United Kingdom of Great Britain and Ireland" . . . . "shall be admitted, as a member, without examination, at any time within twelve months from the acceptance of these letters patent, on the production to the censors of his diploma, and such testimonials of character and *professional qualification* as shall be satisfactory to the said censors."

There is scarcely a person, I should imagine, who would not come to the immediate conclusion, that any M.D. holding a diploma of the kind stipulated in Clause V, and producing such general testimonials, as are usually considered satisfactory in similar cases by other Corporations, (the College of Surgeons, for example, in the case of the Fellowship,) would be admitted at once, as a matter of course. He would, nevertheless, find himself, perhaps when too late, altogether mistaken in that belief. Far be it from me to impeach the good faith, or cast a shade of unjustifiable suspicion over the motives of those who devised this particular clause; but, as it stands, it is very evident that the censors will be at liberty, quite in accordance with the terms of this important condition, to keep out of the College in the most arbitrary way in the world, and as long as they please, any graduate they may not have a fancy for.

"J. A.," a correspondent of a contemporary periodical, apparently a good authority in such matters, he himself having, so he says, taken part in a certain ceremonial, when twelve Fellows were elected simultaneously, pleads hard in favour of the liberal sentiments entertained by the framers of this Charter. It is not my present purpose to give any opinion as to how far these sentiments may be relied on; the case is simply as I have stated, and it cannot, I should say, be too early or too extensively made known.

There are other reasons why the College should be called on to explain more precisely what they mean by exacting, during this so-called year of grace, "testimonials of professional qualification" besides the diploma, which, be it observed, they require should be obtained after "regular examination." Thus, one of the most liberal-minded among the Fellows, a man justly held in the highest estimation by the entire Profession, withdrew, in extreme dissatisfaction, from the Council engaged over the Charter, at a certain stage of their proceedings—a significant set-off against the 12-Fellow business. Moreover, I have it from authority of equal standing and importance in the College with "J.A.," that the London candidate will, in the end, on the score, I presume, of unsatisfactory "professional qualification," be compelled to undergo an examination, just as at present, without the "grace" even of being allowed to pay the reduced fee (15*l.* 15s.). These are rather uncomfortable assurances, and not much calculated to encourage the expectations of those who have so long gone on waiting for the reform which was to enable them consistently to join the College of Physicians.

"J. A." is, I think, much too severe in his remarks on those gentlemen in practice as physicians who do not possess the College licence. Is it necessary to remind him how long it is since the College of Physicians was regarded as the great focus of everything exalted, learned, or respectable in physic, or how notoriously often it has been passed over and neglected by the Government and public in the most alarming sanitary crises? Are people to be blamed because they get careless about a connexion which had long ceased to be either any advantage or any very remarkable distinction?

The Charter in draft having been launched on the wide waters of professional opinion, I shall, I trust, be excused for

taking up so much of your valuable pages. Every gentleman eligible to the indulgencies promised therein will naturally feel anxious as to the real character of a measure which will eventually be the basis of a compulsory legislative enactment. In a recent Number of your Journal, you favoured the Profession with some editorial observations, in consequence, probably, of a communication direct from the College, on the scope of the Charter and intentions of those who got it up. I venture, therefore, to rely that you will not, in common fairness, delay assisting in the solution of the following questions:—

What sort of testimonial of professional qualification over and above the diploma ought to be expected by the most jealous and fastidious Censors' Board?

Whether it is commonly prudent to delegate to any set of men a discretionary power susceptible of such grievous misuse?

I am, &c. HENRY SAVAGE, M.D., F.R.C.S.E.

7, Gloucester-place, Portman-square.

HILL-TOP *VERSUS* VALLEY-BOTTOM WATER.

[To the Editor of the Medical Times and Gazette.]

SIR,—In corroboration of your leading article on this subject, I would mention the following curious fact:—

Llyncarrw is a lake at an elevation of about 1200 feet above the level of the sea, in the Breconshire range of hills. It, originally having no fish, was stocked by the owner about eighteen years since with trout taken from the river Clarwen, a stream separating Breconshire from Radnorshire, and which receives, besides other streams, the waters from this same lake. The trout, which are the only fish in the latter water, are edentulous, or (to use the words of my friend, Mr. Moggridge, upon whose authority I make the statement) have only rudiments of the teeth, whereas, in the Clarwen, these organs are finely developed; nor is this the only change they have undergone by being transferred from the "valley-bottom" to "hill top" water. In the former, the trout are "thin, white-fleshed, flabby, and poor eating;" whereas, those now taken in Llyncarrw are "pink as salmon, firm-fleshed, and good eating."

The marked difference of the same fish in the same waters under the two separate conditions, is very great, and strong in favour of your opinion of the greater healthfulness of the "hill-top" over the "river-bottom" water; for it is not beyond the limits of fair inference to assume, that the same causes which tend to debilitate the trout must act prejudicially upon the health of man.

I have recorded this fact before, in the "Notes on the Teeth," in the pages of the late *Gazette*; but the evident force which it bears upon the question of the relative purity of the "hill-top," when compared to the "valley-bottom" water is so great, that I thought you might not object to have your attention drawn to it.

I am, &c.,

Swansea. C. SPENCE BATE.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

JOHN BISHOP, ESQ., F.R.S., President, in the chair.

DISEASE OF HEART.—GENERAL ENLARGEMENT.—OLD PERICARDIAL ADHESIONS.—DILATATION OF ALL THE CARDIAC CAVITIES AND VESSELS.—FIBRINOUS DEPOSITS.

Mr. B. W. Richardson exhibited a specimen showing the above lesions. It was taken from a young girl 14 years old. Her mother had died suddenly from cardiac disease. Patient had been known to have an enlarged heart for at least four years past, for which no rheumatic or other cause could be assigned. Mr. Richardson first saw her on March 6, 1852. She was then suffering from slight rheumatic swellings in the joints, but previously had not complained. The heart-sounds were abnormal. The organ was evidently much enlarged, and seemed crippled in its movements. In three days the rheumatic symptoms had passed off, but the respiration had quickened, and there were signs of congestion in the right lung. To meet this, cautious leeching was employed, which temporarily gave relief. Up to the 16th, the symptoms did not much vary, but from that date to the 22nd they became greatly worse. The respirations often equalled 40 per minute; the pulse was quick, and exceedingly irregular. The heart's action was rapid and tumultuous, and a loud bruit was heard. The bowels which had before been sluggish, were inclined to be relaxed. On the morning of 22nd, she was suddenly seized with sensations of faintness. In the course of the day she rallied, and read a book with pleasure. In the evening, about nine o'clock, she raised herself to take a little toast and-water, and whilst in the act became very pale, exclaimed, "Oh, how weak I feel!" and laying herself back, instantly expired. In his remarks on this case, the narrator, after alluding to the possibility, that the dilatation of the cavities was caused by the pericardial adhesions, said, that four points were well deserving of attention, all of which had reference to the fibrinous concretions in the heart. First, it was quite obvious to any one who would look at the specimen, that the concretions there seen were direct and true depositions from the blood; that they did not arise from exudation; that there was, in fact, no trace of any endocardial lesion. Secondly, it was equally clear, that these concretions were formed during the life of the patient, and while the blood was circulating. Objections might be made to this, but if the real facts of the case were looked at, it was obvious, that no such concretions could form after the heart had ceased to beat, and to receive new supplies of blood. Let it be supposed, that the heart, at the moment of stoppage, was left with all its cavities full of blood, and that thus charged it should contain six fluid ounces of blood, which was an improbably large quantity; and then came the question, could any six ounces of blood deposit three fibinous concretions like those which were found in the heart now exhibited,—concretions which weighed collectively more than 200 grains; or was it likely that concretions deposited after death could so entwine themselves about the fibres and valves of the heart? It should be observed, that the concretions were three in number. One in the right auricle, which completely filled that cavity; another in the pulmonary artery at its root; and a third in the left ventricle; this last having so entwined itself with the mitral valves, that the faces of the two valves were actually brought close together by it, and were thus firmly bound. The concretions, then, were evidently formed some time before death. 3rdly. The cause, symptoms, and effects of these concretions. It must be borne in mind, that the patient in whose body they were found suffered in the first instance from a slight attack of acute rheumatism,—a disease always marked by an excess of fibrin in the blood. What, then, was more probable, than that this blood in passing over the elevated structures of the moving heart, left portions of the overplus of its fibrin upon those structures? To use a common illustration, the heart might be said to have churned the blood. With the symptoms arising from these concretions the author was now tolerably familiar. He knew, and asserted many days before death, that there were concretions in the heart now in question. He arrived at this conclusion, by taking into account the fact, that the disease (acute rheumatism,) with which the patient suffered at the commencement of the fatal attack, was one in which the fibrinous element is always increased; and he coupled this with the other symptoms—the tumultuous and irregular action of the heart, and the gradual failure of the circulation. The effects of such concretions were, he thought, sufficiently obvious. He believed that in this case, they and they alone were the cause of the death; indeed, the *post-mortem* examination showed no other lesion, except a degree of congestion in the right lung by no means sufficient to cause death, and evidently resulting from the cardiac obstruction. The heart was choked on one side, its valvular apparatus was prevented free play on the other, and death was the necessary result. 4thly. There was an interesting therapeutical fact connected with this case. In its treatment, the great object that was tried to be obtained was to bring the system under the influence of mercury. But this was never accomplished, although for sixteen days one grain of calomel, combined with a small quantity of opium, was given regularly every three hours; it seemed as though the effect of the medicine was met and effectually opposed by the state of the system. The author concluded, by observing, that in all inflammatory cases marked by great superfibrination, (such as peritonitis,) and which ended by what was called sinking, it would be interesting to learn how far similar concretions in the heart might be concerned in bringing about the sinking state.

Mr. Leonard read a paper on

PERFORATING ULCER IN THE STOMACH,

and in producing cases which had fallen under his care since 1825, observed, that as no disease was more insidious in its progress, nor more fatal in its result, so none was more deserving of patient investigation. Young persons in the prime of life, with health so slightly deranged that in most cases medical aid was unsought, were suddenly struck down, and it became obvious to the most uninitiated attendant, that death was at hand, and all that science could do was to attempt to mitigate the agonies of the sufferer. He did not produce these cases as examples of a rare disease; he had a higher object in view. He brought them before the Society that he might collect from its members their experiences of the previous symptoms of the disease which terminated in perforation; that a

correct diagnosis of its earliest stages might be formed, and the patient saved before the fatal extravasation took place. Conceiving this to be the true end and aim of the Society's meetings, he proceeded to state the cases. The first was that of Wm. Shepherd, aged 26, a stonemason. He was leaving the quarry at 6 p.m., when he suddenly laid his hand on his left side, uttered a groan, and fell. He found his countenance indicating extreme anxiety, with deadly pallor, lips livid, nostrils dilated, breathing short; pulse 130, small and thready; extremities cold, thirst urgent, knees drawn up, abdominal muscles tense, with violent pain diffused over the whole abdomen, but most acute in left hypochondrium; found no hernia, and last alvine excretion three days before. He diagnosed peritonitis, and opened a vein while yet on the temporary litter, but got only 12 oz. of blood; but on his arrival at home took 30 oz. more, and pulse rose slightly; applied a large vesicator, and gave castor-oil. Soon after this the man retched violently, but brought up nothing. Pain now increased rapidly, thirst intense, with dreadful restlessness. At 12 p.m., he took 20 oz. more blood; enemata were administered without effect. At 4 a.m. his pulse began to intermit, at 6 was imperceptible, and, while sitting up grasping the vessel for another drink, he fell back and expired. The *post-mortem* examination, 24 hours after death, showed him to be in good condition of body. On opening the abdomen, much gas escaped, and on four or five quarts of turbid fluid floated the castor-oil. Extreme vascularity of the peritoneum and omentum were present, and much fibrin was thrown out. On raising the lesser lobe of the liver, a neat round hole presented itself on the anterior surface of the stomach, which was thickened at the perforation. The other cases were so similar, with the exception of the thickening of the stomach, that we need not quote them. With one exception only they were all young females. The two last cases were the most important; the one, Henry Johnson, having been under the author's care from 3rd January to 18th March, 1850, the perforation being complete on the last-mentioned day, as the patient was swallowing a glass of gin. The other case had been an outpatient of King's College Hospital from 24th November to 2nd December, 1851, on which day perforation took place Mr. Leonard found, in Johnson's case, a cicatrix healed for about an inch and a half above the perforation, and from that and Recamier's case, entertained hope that the ulceration is capable of cure. He entered as minutely as these cases permitted into the symptoms upon which he would trust for diagnosis between this disease and dyspepsia and scirrhus of the pylorus. The principal symptoms were, large evolutions of gas from the affected organ, great irregularity in its power of chymification, showing greater or less appetite, great irritability, pain on reception of food, and more or less nausea and vomiting, the ejecta being often tinged or streaked with blood, the countenance and condition of body giving little indication of what is threatening; but, in the majority of cases, they were considered too slight for medical aid. He submitted, with much diffidence, the following tabular view:—

	Dyspepsia.	Scirrhus.	Perforating Ulcer.
Age generally ...	From about 25 years to 45.	From about 40 years upwards.	From 15 years to 50, but mostly in young subjects.
Sex	More males than females.	About equal.	More females than males.
Condition of Body	Spare, or soon brought to that state, but seldom emaciated.	Slowly loses flesh, and becomes emaciated.	Plump, and with all the appearance of health.
Abdomen.	Often tumid, with loud flatulence.	A tumour often felt somewhere between the sternum and umbilicus.	No appearances whatever.
Countenance ...	Not without colour, but that not naturally distributed.	Pallid.	Natural.
Pain	Not generally acute, and often referred to flatulence, and extending in the course of the duodenum, accompanied often with an enormous evolution of gas.	Severe, and very often acute, and referable to a point between the ensiform cartilage and the back, between the scapulæ, often excited by food, but irregular in the paroxysms.	Not so acute as in scirrhus, but is generally excited by the reception of food. Occasionally much flatulence.
Vomiting.	Of uncertain occurrence, generally referable to some kind of food taken.	Of uncertain occurrence, but when the paroxysm is severe, is produced by all food.	Not generally a symptom till after the ulcer seems to have formed, and then very frequent on taking food.
Heart	Palpitation, with dreams, and a train of nervous symptoms.	Palpitation, with fearful dreams, are common symptoms	No palpitation; no nervous affections.

He considers, however, these cases at present furnish too narrow a basis for practical purposes. The writers on this subject, viz., Drs. Abercrombie, Carmichael Smith, Crampton, Ebermaier, Routh, and Crisp, with Messrs. Gerard and Travers, were cited; and the members of the profession were earnestly requested to take notes of dyspeptic cases, as *post-mortem* examinations without the previous histories were of little use to science. Had Mr. Leonard been aware of perforation in Shepherd's case, he would not have poured castor-oil into the peritoneum, nor a friend of his have given brandy; but, in his subsequent cases, he administered no medicines but opium in pills to mitigate intense suffering.

EPIDEMIOLOGICAL SOCIETY.

Dr. Babington in the Chair.

The Secretary read the following Report:—

The Council, in presenting their second Report to the members of the Society, have much satisfaction in being enabled to congratulate them on the favourable progress made by the Society during the last twelve months.

Since the last annual meeting, the Society has continued steadily to increase the number of its members,—22 having been added to the list of contributing members, and 23 to that of the correspoonding members.

The Council, duly impressed with the importance of extending the inquiries of the Society to foreign and our own colonial possessions, as well as to the different countries of Europe, resolved to complete the list of Foreign and Colonial Secretaries as early as circumstances would permit. A Committee was accordingly established for that purpose, and the Council have now the pleasure of announcing the following appointments, viz.:—

FOREIGN AND COLONIAL SECRETARIES.

Belgium.—A. Sayer, M.D., 28, Upper Seymour-street, Portman-square.

East Indies—James Bird, M.D., 27, Hyde Park-square; and C. Finch, M.D., 58, Porchester-terrace, Bayswater.

France.—Waller Lewis, M.B., F.G.S., 18, Stratford-place, Cavendish-square.

Germany and Russia.—E. H. Sieveking, M.D., 3, Bentinck-street, Manchester-square; and W. E. Swaine, M.D., 6, Upper Seymour-street, Portman-square.

Greece and Italy.—C. R. Walsh, Esq., 42, Half-moon-street, Piccadilly.

Portugal and the Brazils.—J. O. M'William, M.D., F.R.S., R.N., 14, Trinity-square, Tower-hill.

Sweden, Norway, Denmark, and Iceland.—R. Gordon Latham, M.D., F.R.S., 27, Upper Southwick-street, Hyde Park.

West Indies.—Gavin Milroy, M.D., 30, Fitzroy-square.

The importance of these appointments is daily becoming more apparent. Letters have been received by the Foreign and Colonial Secretaries from various parts of the Continent, from India, and from the Brazils, expressive, on the part of our professional brethren and others in these countries, of their warm approbation of the objects of the Society, and of their willingness to co-operate with its members; and already some valuable contributions on subjects connected with epidemic diseases have been received from Sweden, from India, from the West Indies, and from the Brazils.

The Prussian Minister and the American Minister have each addressed a letter to the President of the Society, expressive of great interest in its objects, and offering in the most handsome manner to transmit letters and papers from the Society to the countries they respectively represent, and in other respects to aid the operations of the Society. There is also reason to believe, that similar facilities for holding communication with other countries will ere long be granted by the other foreign Embassies, and then the Society will be relieved from the heavy postage charges, which must otherwise be defrayed from its funds.

The Council, having deemed it would be conducive to the interests of the Society, that the first address to the Society by the President should be more extensively circulated among its members and the public, caused 1000 copies of this, as well as of the President's second address, to be printed and distributed accordingly.

The Reports from the Secretaries of the various Committees indicate, that their members are making steady and diligent progress in the investigation of the subjects with which they respectively have been entrusted.

The Small-pox and Vaccination Committee have already issued queries bearing on the subject of their inquiry to not less than 1800 medical men, of whom 527 have had the kindness to reply

more or less minutely to the questions of the Committee, and these replies have been tabulated, analyzed, and arranged.

The Committee have likewise put themselves in communication with the Poor-law Commissioners, with the Board of Health, and with the Registrar-General. These authorities have, with the greatest kindness and liberality, put every document in their possession at the disposal of the Committee, and a vast fund of important information has thus been obtained.

With the view of rendering the investigation as comprehensive as possible, the Committee have been induced to draw up another and very short form of queries, which they intend to address to all the Union medical officers (more than 3000 in number) throughout the kingdom. These queries the Poor-law Board have most kindly undertaken to forward free of expense. The same form will also be sent to various other medical men. The Committee, moreover, have already put themselves in communication, or are about to put themselves in communication with the authorities of the "National Vaccine Establishment," of the Small-pox Hospital, of the Royal Jennerian Institution, of the Army and Navy Medical Boards, and of various public institutions throughout the kingdom.

Besides their inquiries in this country, the Committee have sent, through the Hon. the Board of Directors of the East India Company, a certain number of their queries to medical men stationed in various parts of India, in reply to some of which a package of letters, containing much valuable information, reached the Society, from Bombay, by the last mail. They have sought and obtained direct information relative to the laws affecting vaccination, and the practice of it as pursued in Austria, in Prussia, and in Sweden. Within the last few days, a series of valuable papers has been received from Sweden, the statistics of which have been reduced to the form required for the Report of the Committee. The Royal ordnance and other papers in the Swedish language, on the same subject, are also being translated into English, through the kind agency of the Chevalier Tottie, Consul-General for Sweden and Norway.

Different members of the Committee have been engaged in examining various published works, Reports, and other documents on small-pox and vaccination.

From the great extent of the inquiry thus undertaken by them, —an extent, indeed, which has appeared to get constantly larger as the Committee have proceeded in their labours—it is impossible for them to say when they will be able to present a formal Report. The probability is, that they will avail themselves of the permission already granted by the Council, and present a series of Reports on the subject. But, whatever determination they may eventually come to on this point, they are sure that they will best consult the wishes of the Council, and act most in conformity with the high character and purpose of the Epidemiological Society by avoiding immature conclusions, and by steadily pursuing their investigations to the utmost extent to which they are capable of being carried with advantage.

As has been stated on a former occasion, the Committee appointed to inquire into the "Condition of Common Lodging-houses," etc., obtained a sufficient number of replies to the queries issued by them to enable them to present a Report, which is now in the hands of the Council. But the important measures which the Earl of Shaftesbury succeeded in carrying through both Houses of Parliament fortunately rendered the interposition of the Epidemiological Society, in a great degree, unnecessary. The working of Lord Shaftesbury's enactments will, however, continue to receive the attention of the Committe.

The Epizootic Committee, conducted by Professor Symonds, of the Royal Veterinary College, assisted by several distinguished members of the Veterinary and Medical Professions have held several meetings; but circumstances have hitherto prevented their making much progress in their operations. They, nevertheless, continue to receive assurance of valuable co-operation from various parts of the country; and the Honourable the Board of Customs have kindly directed their Inspector of Cattle to give the Committee such information as he may be enabled to afford regarding the diseases affecting foreign cattle imported into this country.

The Hospitals Committee.—This Committee appointed to inquire into the epidemic diseases prevailing in public hospitals, have completed their comprehensive form of queries, which is now being printed, and will be immediately circulated extensively among physicians and surgeons of the various hospitals throughout the kingdom, and others of the Profession, from whom information on the various subjects embraced by the Committee is likely to be obtained.

Among other Committees contemplated by the Council, it is intended to institute Committees to investigate scarlet fever, and other epidemics which affect the human race; likewise the potato-disease, and other diseases affecting the vegetable kingdom. But the formation of these Committees, as well as the successful carrying out of the objects of the Committees already existing, depend greatly upon the assistance which the Society may receive from the Profession and the public.

The Council are happy to announce, that several handsome pecuniary donations have been lately made to the Society, which will be more particularly noticed in the Report of the Finance Committee. They also gratefully acknowledge, that some valuable books have been presented to the Society since the last annual meeting.

To the Medical Press the thanks of the Council are eminently due, for the publicity they have uniformly given to the transactions at the Society's meetings,—more especially for the warmth with which they urged upon the Profession the necessity of their forwarding the objects of the Small-pox and Vaccination Committee.

The Council, then, in looking back upon the events of the Society, during the last twelve months, cannot but consider they have reason to be satisfied with its progress, and with the impression it has already made upon the general and professional public.

Judging from the additions that have been made to the numbers of the ordinary and corresponding members; from the papers that have been read at the ordinary meetings, as well as from the discussions that the reading of those papers have excited; from the extent to which the Society is gradually opening up communications with other countries, and from the manner in which its operations have all along been noticed and promoted by the public Press, and more recently by some from Government boards and the various representatives of foreign power in London, the Council feel themselves justified in anticipating that the Epidemiological Society is destined, at no distant period, to occupy an important position among scientific societies.

UNIVERSITY OF LONDON.

On Wednesday, a meeting of the Senate and other members of the University of London was held in the rooms of the Royal Society, Somerset-house, for the purpose of conferring degrees, honours, and prizes.

The Chancellor of the University (the Earl of Burlington) presided, and was supported on his right hand by the Vice-Chancellor (Mr. J. G. Shaw Lefevre), and Mr. George Grote. We were informed, that the following members of the Senate were also present:—Mr. Bacot, Dr. A. Billing, Professor Brande, Sir James Clark, Bart., Professor Faraday, Mr. Hallam, Sir S. L. Hammick, Bart. Dr. Hodgkin, Dr. Jerrard, Mr. Kiernan, Mr. G. C. Lewis, and Mr. Ridout.

The names of the candidates who have obtained honours, scholarships, exhibitions, medals, and prizes, in 1851, are as follow—we select those appertaining to the Medical Profession:—

DOCTOR OF MEDICINE.

Growse, R., Guy's Hospital—Gold medal for a Commentary on a case in medicine.

BACHELOR OF MEDICINE.

Honours in Physiology and Comparative Anatomy.

Reynolds, J. R., University College, University medical scholar and medalist.
Moocktoo, D. H., King's College, medalist.
Odling, W., Guy's Hospital.
Head, E. A. H., King's College.

Honours in Surgery.

Head, E. A. H., King's Coll., University medical scholar and medalist.
Thompson, H., University College, medalist.
Reynolds, J. R., University College.
May, G., King's College.
Stocker, J. S., Guy's Hospital.

Honours in Medicine.

Reynolds, J. R., University College, University medical scholar and medalist.
Thompson, H., University College, medalist.
Head, E. A. H., King's College.
Stocker, J. S., Guy's Hospital.

Honours in Midwifery.

Thompson, H., University College.

Honours in Chemistry.

Roberts, W., University College, prizeman.
Lambert, H. S., Queen's College, Birmingham.

Honours in Animal Physiology.

Roberts, W., University College, prizeman.
Buchanan, G., University College.
Fry, E., University College.
Beddoe, J., University College.
Oats, H. C., University College.
Rae, J., University College.

Honours in Vegetable Physiology and Structural Botany.

Buchanan, G., University College, } Equal.
Roberts, W., University College, }

FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE.

Honours in Anatomy and Physiology.

Hillier, T., University College, exhibitioner and medalist.
Tunzelmann, J. W. de, University College, medalist.
Roberts, W., University College.
Ekin, J., University College.
Robbs, W. E., King's College.
Ramskill, J., Guy's Hospital.
Carter, H. V., St. George's Hospital,
Winter, J. N., Guy's Hospital.

Honours in Chemistry.

Roberts, W., University College, exhibitioner and medalist.
Ramskill, J., Guy's Hospital, medalist.
Hillier, T., University College.
Tuozelmann, J. W. de, University College.
Carter, H. V., St. George's Hospital.

Honours in Materia Medica and Pharmaceutical Chemistry.

Ramskill, J, Guy's Hospital, exhibitioner and medalist.
Tuozelmann, J.W. de, University College, medalist.
Hillier, T., University College.
Mushet, W. B., University College.
Winter, J. N., Guy's Hospital.
Ekin, J, University College.
Briggs, H., University College.
Roberts, W., University College.

Honours in Botany.

Tuozelmann, J. W. de, University College, medalist.
Hillier, T., University College.
Ramskill, J., Guy's Hospital.
Briggs, H, University College.
Winter, J. N., Guy's Hospital.

Honours in Chemistry.

Jones, W. P., University College, prizeman.
Bond, F. T., Queen's College, Birmingham.
Brown, T. E. B., Guy's Hospital.
Blackmore, S. H., University College.
Cattell, W., King's College } Equal.
Thorogood, J. C., University College }
Clapton, E., St. Thomas's Hospital.
Worsley, P. J., University College.
Wolston, C., Queen's College, Birmingham.

Honours in Botany.

Brown, T. E. B., Guy's Hospital, prizeman.
Bennett, A. W., University College.
Clapton, E., St. Thomas's Hospital.

Honours in Zoology.

Bond, F. T., Queen's College, Birmingham.
Wolston, C., Queen's College, Birmingham.
Thornton, J. H., King's College.

The following degrees were conferred :—

		Presented by
Salter, H. H., M.D., King's	. . .	Prof. Miller, M.D.
Growse, R.		
Habershon, St. O.,	M.D., Guy's Hospital .	Dr. Addison.
Hicks, J. B.,		
Hassall, A. H., M.D., R. Coll. Surg. in Ireland		Prof. Graham.
Herapath, W. B., M.D., Bristol, and Lon. Hos.		Prof. Graham.
Radcliffe, C. B., M.D., Leeds School of Med. .		Prof. Graham.
Leatham, E. A., M.A., University College .		Prof. Clough.
Jackson, E.,		
Reynolds, J. R.,	M.B., University College .	Prof. Graham.
Thompson, H.,		
Beale, L. S.,		
Griffith, S.,	M.B., King's College .	Prof. Miller, M.D.
Head, E. A. H.,		
Monckton, D. H.,		
Hunt, R.,		
Odling, W.,	M.B., Guy's Hospital . .	Dr. Addison.
Stocker, J. S.,		
Burchell, P. L., M.B., Westminster Hospital .		Dr. Basham.

A considerable number of names, besides those already given, were on the list for presentation to the Chancellor, but as the gentlemen to whom the names belonged did not answer to the call made upon them, of course they received no degree upon this occasion.

MEDICAL NEWS.

University of London.—The Graduates' Annual General Meeting, held at the Freemasons' Tavern, Great Queen-street, last Tuesday evening, Jacob Waley, Esq., M.A., presiding, was very numerously attended. The Chairman congratulated the meeting on the advantageous position which they had now reached, and expressed a hope, that their labours would speedily terminate with the desired success. He justified the course which had been pursued, and contended for the desirability of the object sought for. The Secretary read the Report, which congratulated the Graduates upon their now holding a position far in advance of any hitherto attained. "With respect to the franchise, the Committee have already succeeded in raising the claim of the Graduates to a position engaging the serious and favourable attention of influential Members of the House of Commons. They have also drawn up a statement of their case for the use of Members of both Houses, and the public generally. At no distant day, the Committee believes that success is certain; inasmuch as every fresh movement has improved the position of the Graduates, and increased the respect in which they are held by the public at large." (Loud cheers.) Dr John Storrar moved, and T. S. Osler, LL.B., seconded, the adoption of the Report. Dr. C. J. Foster, M.A., moved, and G. Jessel, Esq., M.A., seconded the following resolution.—"That this meeting earnestly trusts that the appointment by the Senate of the Committee of the 21st ult. will result, at no distant period, in the acceptance by the Senate of a Charter, incorporating the Graduates into the University, with power and privileges calculated to raise the status of the Graduates, and to benefit the University itself; and authorises the Committee to act in their best discretion during the year now ensuing, with reference to any plan that may be proposed for that purpose." An amendment was moved, suggesting the calling of a special meeting of the whole body of Graduates to take the provisions of the Charter into consideration. Only five hands were held up for the amendment, and the original resolution was carried amid loud applause. Resolutions were then carried, requesting the Committee to continue their exertions for the erection of the Graduates into a Parliamentary constituency, and also to amend the Law L., by giving the Committee power to appoint, as Corresponding Members, Graduates who may be residing in London, or within twenty miles of the Post-office.

A Proposal is before the House of Commons to exempt the University of London from the operation of the Charitable Trusts Bill.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 30th ult.:—

Banbury, Richard, Launceston, Cornwall.
Barnett, Richard, Belfast.
Bockett, William Charles, Walworth.
Costerton, Horatio, Weymouth, Dorsetshire.
Webb, William, Barton-under-Needwood, Staffordshire.
Whitby, Robert, Bedford-square.
Leeming, Robert Toulmin, Lancaster.
Jane, Warren, Chepstow, Monmouthshire.

At the same meeting of the Court, Mr. Charles Frederic Augustus Courtney passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date December 20, 1847.

Collegiate Election.—At the request of numerous correspondents requiring information as to the candidates next in rotation for seats in the Council of the Royal College of Surgeons, we subjoin the following gentlemen eligible for that distinction:—

Adams, John, St. Helen's-place.
Avery, John, Queen-street, May-fair.
Cock, Edward, St. Thomas's-street, Southwark.
Coulson, Wm., Frederick-place, Old Jewry. (Elected.)
Dover, Frederick, Kentish-town.
Farish, James, Lancaster-place.
Gulliver, George, F.R.S., Royal Horse Guards.
Hilton, John, F.R.S., New Broad-street.
Hobes, John, Southampton-row.
Lane, Samuel Armstrong, Grosvenor-place.
M'Whinnie, Andrew M., New-bridge-street, Blackfriars.
Owen, Richard, F.R.S., Royal College of Surgeons.
Partridge, Richard, F.R.S., New-street, Spring-gardens.
Pennington, William, Montague-place.
Phillips, Benjamin, F.R.S., Wimpole-street.
Quain, Richard, F.R.S., Cavendish-square.
Shaw, Alexander, Henrietta-street, Cavendish-square.
Solly, Samuel, F.R.S., St. Helen's-place.
Tatum, Thomas, George-street, Hanover-square.
Tuson, Edward Wm., F.R.S, Harley-st., Cavendish-square.

Since writing the above, we find that the New Supplemental Charter, which it is expected will come into operation before the ensuing election in July, will, however, vitiate the order of precedence heretofore observed, as, under the provisions therein con-

tained, it will be competent for the friends of those "Fellows" hitherto passed over, again to propose them, as well as other younger Fellows, provided they have held that distinction for a sufficient period.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 29, 1852:—

BUTLER, GEORGE, Brighton.
DAVIES, JOHN EDWARD, Stone's-end, Southwark.
JOHNSON, HORACE EDWARD, Warwickshire.

NAVAL APPOINTMENTS.—Assistant-surgeon Godfrey J. A M'Cullagh (1844), to the Highflyer steam-sloop, at Portsmouth.

YEOMANRY APPOINTMENT.—1st West Yorkshire Yeomanry Cavalry, 3rd April, Robert Thomas Cooke, gent., to be Assistant-Surgeon, vice Square, resigned.

HER MAJESTY has been pleased to appoint Samuel Wall Jones, Esq., to be Colonial Surgeon for the Settlement on the Gold Coast.

CHARITY FOR HOSPITAL PURPOSES.—The Seamen's Hospital Society, which held their anniversary dinner lately, when a large amount was subscribed for the benefit of the institution, have announced the amount subscribed by different persons; among the rest,—Her Majesty, 105*l.*; the Emperor of Russia, 20*l*; the Lord High Admiral of Russia, 20*l.*; Trinity Corporation, thirty-first donation, 200*l.*; East India Company, twenty-ninth donation, 105*l.*; the Duke of Northumberland, 250*l.*; Baron Rothschild, 20*l.*; Trinity House, Hull, 25*l.*; John Pepys, Esq., fifteenth donation, 50*l.*; from Norwegian ships, per the Consulate, 50*l.* 13s. 4d.; per Messrs. Sack, Bremer, and Co., 45*l.* 9s. 6d.; from Swedish shipmasters, 21*l.*; from foreign shipmasters, 20*l.* 15s.; and these, with sundry 10*l.* 10s., 5*l.* 5s., 2*l.* 2s., etc., make up a total of 1359*l.*

KING'S COLLEGE.—The Annual Meeting of the proprietors of this institution was held lately, Lord Howe in the chair, when the Report of the Council was read, and was considered satisfactory. During the year, there were 199 medical pupils; the receipts from them being 4210*l.* 10s. 2d. During that time, the Rev. Dr. Warneford had presented 5000*l.* to the College for the foundation of several scholarships in the medical department. It was the intention of the Council, that the foundation-stone of the new Hospital should be laid on the 16th of June, after which every effort would be made to expedite the completion of the building. The Prizes were next distributed:—Anatomy, Palmer, J. W.; Physiology, Masters, M. T.; Chemistry, Palmer, J. W.; Practical Chemistry, Hulke, J. W.; Materia-Medica, Alexander, E. W.; Surgery, Hulke, J. W.; Medicine, Davis, M.; Midwifery, Masfen, W. E.; Botany, Masters, M. T.; Forensic Medicine, Hulke, J. W.; Comparative Anatomy, Partridge, S. B.; Medical Clinical (Winter), Cheatle, T. H.; Medical Clinical (Summer), Macanamara, F. N.; Surgical Clinical (Winter), Davis, M.; Surgical Clinical (Summer), Partridge, S. B.; Medical Society's Prize, Playne, A.; Leathe's Endowment, Liveing, E.; Warneford Endowment, 1st Prize, Macnamara, F. N.; 2nd Prize, Masfen, W. E.

UNIVERSITY COLLEGE, LONDON.—Distribution of Prizes, April 30, 1852.—Faculty of Medicine. Session 1851-52.—Medals and Prizes awarded:—Longridge prize, 40*l.*, for general proficiency (1851) to Joseph Lister, of Upton. Chemistry.—Professor Graham. Gold, William Price Jones, of Bala, North Wales; first silver, Frederick H. Robarts, of London; second silver, William Stanley Jevons, of London; (Birkbeck laboratory students) gold, Alfred Haslem, of Hertford; silver (equal), Arthur W. Wills, of Birmingham, and James Bell, of Armagh. Botany (1851).—Professor Lindley. Gold, Robert B. Smart, of Balshaw; silver, George Buchanan, of London. Anatomy.—Professor Ellis. Gold, John Z. Lawrence, of Hampstead; first silver, George Buchanan; second silver, Frederick T. Bond, of Truro; silver, junior class, John D. Scurrah, of Burnley. Pathological Anatomy (1851).—Professor Jenner. Gold, Joseph Lister; silver, F. W. Sayer, of Newport, Isle of Wight. Anatomy and Physiology.—Professor Sharpey. Gold, John Z. Lawrence; first silver, Fred. Wm. Sayer; second silver, James Turle, of Holloway. Medical Jurisprudence (1851).—Professor Carpenter. Prize (books), F. W. Sayer. Comparative Anatomy.—Professor Grant. Gold, John Turle, of Holloway. Materia Medica (1851).—Professor Garrod. Gold, Thomas Hillier, of Newmarket; first silver, William Mushet, of London; second silver, John Z. Lawrence. Surgery.—Professor Erichsen. Gold, William Roberts, of Bodedern, Anglesea; first silver, Arthur Dupuy, of Mauritius; second silver, Robert Grundy, of St. Helens. Midwifery (1851).—Professor Murphy. Gold, F. W. Sayer; first silver, James Turle; second silver, George Buchanan. Medicine.—Professor Walshe. Gold, St. John Edwards, of Bangor, North Wales; silver (equal), F. W. Sayer, and William Roberts. Fellowes' Clinical Medals.—Professor Parkes. Gold (1851), Joseph Lister; gold (1852), St. John Edwards.

THE LONDON HOSPITAL.—The One Hundred and Twelfth Anniversary Dinner took place at the London Tavern, on Thursday, April 29. His Royal Highness the Duke of Cambridge presided, and advocated the claims of the charity in a forcible and impressive manner. During the last ten years, 198,604 patients have been under treatment. Of this number, 75,474 were accidents brought to the hospital. At the termination of the entertainment it was announced by the treasurer, that 1807*l.* 8s. 6d. had been collected.

METROPOLITAN FREE HOSPITAL.—The anniversary festival of this Charity was held on Wednesday last, at the London Tavern, the Earl of Carlisle in the chair, supported by Sir E. N. Buxton, and the Messrs. Gurney, Fry, Rogers, and other eminent philanthropists. The cause of the Charity was ably advocated by the noble President, and many other gentlemen. Nearly 1600*l.* were collected for the general purposes of the Institution, and a large amount subscribed towards the building fund.

BETHLEM HOSPITAL.—At a special meeting of the Governors of this Hospital, held lately, it was recommended by the Committee in their Report, that there should be appointed a resident medical officer of a very superior order, who, with the present apothecary, should have the entire management and control of the patients and servants, and by devoting the whole of his time, should secure to the establishment a more perfect attention to the various cases under observation.

SCHOOL OF MEDICINE, ADJOINING ST. GEORGE'S HOSPITAL.—The distribution of prizes took place at this school on Saturday, May 1, at half-past two o'clock, Sir James Clark, Bart., in the chair. Before the ceremony of giving away the prizes, a report was read, from which we give the following extracts:—"Although the teachers have reason to congratulate themselves on the obvious general improvement manifested by the pupils in their devotion to their studies, they feel that some alteration might take place in the mode of recording the attendance of gentlemen on lectures in the schedules of the College of Surgeons and the Apothecaries' Society. In order that the attendance of each pupil on lectures may be fairly estimated, the lecturers of this school propose to enter in a book, kept by each lecturer for the purpose, the attendance of each pupil, and then, at the end of the course, to certify to the exact number of attendances. They feel confident, that in carrying out such a plan they will have the support of all the diligent students of their classes. After drawing attention to the importance of microscopical anatomy and chemistry, the Report says:—"It is only as the student bases his medical opinions upon a sound knowledge of the intimate structure of the tissues and chemical processes which go on in the human body, that he can be saved from the danger of falling a prey to the prevailing medical delusions,—delusions all the more dangerous, that they are countenanced by an ignorant public; and too often lead to those rewards which alone ought to be shared by the intelligent and honest practitioner. It is gratifying to the teachers of this school to be able to state, that they are not aware of a single instance of any gentlemen who have been educated here who have so far disgraced their Profession as publicly to practice homœopathy or its allied fashionable impositions. Before concluding the Report, it may perhaps be allowed to refer to the changes which are taking place in the medical corporations as causes of congratulation among the members of the Medical Profession. The new Charter to the College of Surgeons has removed much of heartburning and jealousy caused by the last; and the near prospect of a new Charter for the College of Physicians, by which that Institution may become a more active and useful body in the Profession, and instrumental in advancing its highest interests,—these are but the indications of a disposition on the part of the Legislature to regard with increasing interest a Profession, whose efforts for the public weal, if they do not stand first, do not at least stand second to any other. Never was there a time when the Medical Profession, by its knowledge of the laws of health and disease, could confer greater benefits upon mankind; and never was there a state of society in which the demands for the aid of the Medical Profession were greater. It rests with the Legislature to make those laws by which the rights of property shou'd not destroy the lives of the community, and to give free scope in every direction to the blessings which the Medical Profession has the power to confer." Prizes were presented in the several classes to the successful candidates:—Anatomy, Physiology, and Practical Anatomy: Gold medal, Mr. R. Benson; silver medal, Mr. T. Forder; certificate, Mr. F. Carter. Junior Anatomy (students of first session): Bronze medal, Mr. G. P.

Girdwood; certificates, Mr. F. E. Webb and Mr. E. E. Lloyd. Clinical Medicine: Certificate, Mr. A. T. H. Waters. Clinical Surgery: Prize, Mr. A. Umphelby. Practice of Medicine: Prize, Mr. A. T. H. Waters. Surgery: Prizes, Mr. A. Umphelby and Mr. R. Benson. Chemistry: Prize, Mr. G. P. Girdwood; certificate, Mr. E. E. Lloyd. Medical Jurisprudence: Prize, Mr. A. T. H. Waters; certificate, Mr. R. Benson. Botany: Prize, Mr. R. C. Hoile; certificates, Mr. C. Chapman and Mr. T. Forder. Practical Chemistry: Prize, Mr. Yorke H. Johnson; certificate, Mr. A. Garden. Midwifery: Senior prizes, Mr. R. Benson and Mr. A. T. H. Waters; junior prize, Mr. C. Chapman; certificate, Mr. R. C. Hoile. Materia Medica: Prize, Mr. E. Hall; certificates, Mr. T. Forder and Mr. R. C. Hoile.

Western Medical and Surgical Society of London.—At the annual meeting of this Society, on the 2nd of April, Dr. Robert Lee, F.R.S., President, in the chair, the Report of the Council (which gave a very favourable account of the state and prospects of the Society) was read, and the following members were unanimously elected office-bearers for the ensuing year:—President —G. A. Mantell, LL.D., F.R.S., F.G.S., etc., etc. Vice-Presidents —C. J. B. Aldis, M.D.; A. W. Barclay, M.D.; T. Cahill, M.D.; F. Godrich, Esq. Treasurer — G. Woolley, M.D. Council— W. Batten, Esq.; E. J. Bullock, Esq.; J. S. Christian, M.D.; — Cumming, M.D.; D. Davies, Esq.; W. Martyn, Esq.; W. C. Meates, Esq.; G. Sampson, Esq.; B. Smith, M.D.; R. Synnot, M.D.; D. Wane, M.D.; E. L. Webb, Esq. Honorary Secretaries—E. C. Seaton, M.D.; T. Keen, Esq.

Medical Benevolent College.—At a meeting of the Council, held in Hanover-square, on Tuesday, the 4th inst., the Right Hon. Earl Manvers, President, in the chair, the Right Rev. the Lord Bishop of Bangor was unanimously elected Vice-President. The cordial thanks of the meeting were voted to the Lord Bishop of St. Asaph, for his most excellent sermon preached in aid of the funds of the College, at the Holy Trinity, Brompton, on the 25th ult.; and the Rev. Mr. Irons was elected a Life Governor, for his kindness in granting the use of his pulpit on the occasion. The Treasurer's Report was most satisfactory for the last month.

Epidemiological Society.—A meeting of this Society was held, on Monday last, at the house of the Royal Medical and Chirurgical Society, Dr. James Bird in the chair. The meeting had been rendered special for the purpose of altering the law relating to members. Several new members were elected. An interesting paper on yellow fever, by Dr. Bascome, of Wyke-house, Brentford, was read by that gentleman, an abstract of which we shall probably lay before our readers. The paper announced to be read at the meeting in June is on small-pox and vaccination in India, by Dr. Finch.

The Sydenham Society.—The anniversary meeting of this Society was held at its apartments, on the 1st inst., Sir James Clark, M.D., President, in the chair. The Secretary having read the Report of the Council, the Treasurer, Dr. Babington, gave an account of the financial condition of the Society; in the course of which he stated, that in addition to a balance of 746*l.* 17s. 6d. in hand at the last meeting, and sundry sums paid in for the books of the past years, 1270 members had paid the annual subscription for 1852, the total amount being 2316*l.* 5s. 5d. Among the expenses, were editorial, 262*l.* 10s., printing, 776*l.* 7s. 6d., Secretary's salary, 157*l.* 10s., with sundry other payments. Balance in hand, 555*l.* The election for the next year took place, and the usual votes of thanks were passed.

The endowments of the munificent Dr. Warneford in behalf of Queen's College and Queen's Hospital, Birmingham, now exceed 25,000*l.*

Worcester General Infirmary.—The election of a house-surgeon, in the room of the late Mr. Cole, took place at the Worcester General Infirmary on the 3rd of May. Two candidates only (Mr. G. A. Sheppard and Mr. Erlin Clarke) went to the poll, both being natives of the "faithful city." The first-named gentleman was declared duly elected.

The Pharmacy Bill.—The Petition of the Medico-Ethical Society of Warrington, to the House of Commons, in Parliament assembled:—"Showeth, That your Petitioners are legally qualified medical practitioners in the town and neighbourhood of Warrington, and that they have examined a Bill now before your Honourable House, entitled, 'A Bill for Regulating the Qualifications of Pharmaceutical Chemists.' That your Petitioners are well convinced, that great evils have arisen from, that health is tampered with, and life lost, in consequence of the common practice of druggists prescribing over the counter, and visiting patients; and that if the Bill, in its present shape, becomes law, while the druggist will not in any way be better qualified to act as a medical practitioner, the new status given by the Bill will be the means of deceiving the people, and of aggravating the present evils indefinitely. That no provision is made to secure good and genuine drugs for the use of the public, as in the Apothecaries' Act, which contains clauses giving a right of search to the officers of the Society, with a power of destroying impure or adulterated drugs, and of fining persons having such in their possession; and your Petitioners submit, that if such clauses were necessary in the Apothecaries' Act, they are still more imperative in the Pharmacy Bill. That by another clause in the said Act, an apothecary substituting any drug for the one actually prescribed, is liable to fine and other penalties therein enumerated; but no such provision is contained in the present Bill. Your Petitioners, therefore, humbly request your Honourable House to adopt such measures as may be necessary for preserving the rights of the medical practitioner, for preventing the use of improper or adulterated drugs, for securing an accurate dispensing of all medicines, for protecting the health and lives of the people, and for avoiding those inconveniences which always arise from endowing Corporations with the powers of the Legislature. And your Petitioners will ever pray, etc. Signed on behalf of the Society."

Mr. Pascoe's Case.—The physicians and surgeons practising in the city of Rochester, and in the town of Chatham and the neighbourhood, have petitioned the Secretary of State for the Home Department on the case of Mr. Pascoe. The petition was despatched on the 3rd instant, and the prayer was as follows:—"That you would be pleased to direct, that a reconsideration be made of the evidence adduced at the trial of Mr. William Hamlyn Pascoe, to the intent, that should there be wanting evidence to show knowledge of pregnancy, on the part of Mr. Pascoe, at the period of his prescribing the oil of savine, he may be restored to liberty, inasmuch as the medical evidence supplied by Mr. Moorman is contrary to the experience of the Medical Profession generally."

Hayes *v.* Deakin.—This was a case heard lately in the Rolls Court, for an injunction to prevent the defendant from practising as a surgeon at Worksop, or within ten miles thereof, for the period of seven years. It appeared that the defendant, on becoming assistant to the plaintiff, agreed to give a bond undertaking not to practise in Worksop, or within ten miles thereof, for seven years after quitting plaintiff's employment; but the bond was never executed, only an agreement being entered into. The defendant pleaded, that, in signing the agreement, he had mistaken its tenor, supposing it to refer to some articles of partnership between himself and the plaintiff, and that he was ignorant of its real character. The Master refused the injunction, leaving to the plaintiff the right to bring an action, if so advised, making the costs costs in the cause.

Morpeth Board of Guardians.—At a special meeting of the Board, held on the 28th inst., the following important resolution towards extending the practice of vaccination was proposed by William Jobling, Esq., and seconded by James Hood, Esq., and carried:—"That all duly qualified surgeons in the union be appointed under the Vaccination Act to vaccinate all children in their private practices, and that they be paid the usual fee by the Board." This is a step in the proper direction, and we hope that other unions will follow the example of the Morpeth Board, and, by so doing, fully carry out the benevolent intentions of the immortal Jenner, and prevent the frightful ravages of small-pox. Owing to the unwearied exertions of Messrs. O'Connor and Hood, surgeons, the Guardians were furnished with accounts of unprotected cases of small-pox, and obstinate facts to strengthen the arguments in support of the cause they had taken up.

A wing of the Hospital Catolengo, at Bourg Dora, Piedmont, was involved in the ruin caused by the late explosion of the powder-magazine, and a number of the sick were, it is said, destroyed by its fall.

Mortality Notabilia.—In the week ending Saturday, May 1, the number of deaths registered in London was 1026, which is nearly the same as in the previous week. In the ten corresponding weeks of the years 1842-51 the average was 903, which, if raised in proportion to increase of population, becomes 993. Compared with the calculated amount, the mortality of last week exhibits an excess of 33; and hence it appears that though the public health has improved since March, it is not yet in so favourable a state as might be expected at this period of the year. In comparing the results of the last two weeks, it will be seen that there is again a slight increase in deaths referred to the principal pulmonary complaints, except consumption, those caused by bronchitis having risen from 71 to 86, those by pneumonia from 61 to 67, and the total of this class from 172 to 187, while

the corrected average of the ten weeks corresponding to last is 145. The zymotic class has also increased in the two weeks from 204 deaths to 232 (while the corrected average is 190), arising partly from scarlatina. This disease, which was fatal in the previous week to 38 children, numbered last week 45 cases, and prevails considerably at present; hooping-cough rose from 35 to 42.

DEATHS *in the Metropolis for the week ending Saturday, May* 1, 1852.

Causes of Death.	May 1. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	481	349	196	1026	9033
Specified Causes	478	348	196	1022	8972
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	162	52	18	232	1727
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	23	16	44	443
3. Tubercular Diseases	76	116	5	197	1874
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	46	19	40	105	1147
5. Diseases of the Heart and Blood-vessels	3	22	12	37	338
6. Diseases of the Lungs and of the other Organs of Respiration ...	85	56	46	187	1318
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	21	23	8	55	556
8. Diseases of the Kidneys, &c. ...	...	6	1	7	98
9. Childbirth, Diseases of the Uterus ...	...	9	...	9	97
10. Rheumatism, Diseases of the Bones, Joints, &c.	2	5	2	9	91
11. Diseases of the Skin, Cellular Tissue, &c.	4	1	...	5	17
12. Malformations	1	...	...	1	27
13. Premature Birth and Debility ...	32	2	...	34	209
14. Atrophy	23	1	1	25	133
15. Age	...	...	42	42	497
16. Sudden	5	2	2	9	99
17. Violence, Privation, Cold, and Intemperance	10	11	3	24	271
Causes not Specified	3	1	...	4	61

TO CORRESPONDENTS.

We have to intimate that, in future, all Communications for this Journal must be authenticated; gentlemen, therefore, who address us must favour us with their names,—certainly not for publication, but that we may be satisfied of their good faith. Henceforth, then, it is to be understood, that, when a letter is unnoticed, it is because the writer's card did not accompany it.

Gentlemen desiring personally to communicate with the Editor on the business of the Journal will find him, during the Summer Months, on Tuesdays, Wednesdays, and Thursdays, between the hours of 12 and 2, at the Office, 46, Princes-street, Soho.

It is again requested that communications shall not be otherwise addressed than

To the Editor,
"Medical Times and Gazette" Office,
46, Princes-street, Soho,
London.

Mr. Pascoe's Case.—Having last week intimated, that our correspondence on this subject was closed, we must decline inserting several letters we have since received. The matter has already been most thoroughly investigated, and is quite exhausted. Doubtless, we shall soon be able to announce that Mr. Pascoe has received the Royal pardon.

Terra Firma.—1. No. 2. No.

Mr. Jones, of Liverpool.—A letter addressed to the Secretary will elicit the information required.

A Subscriber, York.—Apply to the Hon. Secretaries of the Metropolitan Sanitary Association, 10, Craig's-court, Charing-cross.

[To the Editor of the Medical Times and Gazette.]

Sir,—This afternoon, a weak, delicate-looking man, who was in an extreme state of intoxication, came into my surgery, and demanded to be bled. I inquired into his case, but remonstrated with him, and told him that "if he would call on the morrow I would talk over the matter with him." He left, and went to a neighbouring practitioner, who bled him, for which he had to pay one shilling. Is it possible, Sir, that in our age a medical man can make blood-letting a matter of business, and take away 16 oz. of vital fluid from a man who had drowned his reasoning faculties with liquor? Are we to take the *ipse dixit* of a patient, that "he ought and must be bled," without inquiring into the case, more especially from on who has this delusion fostered on him by drink? Ought we not to practis from deduction? Such conduct as this ought to be repudiated by every well-thinking mind. It is dishonest to the Profession, but more dishonest to the poor patient. I am, &c. Frederic Robinson.
Bodmin, Cornwall.

A Young Practitioner.—Since the days of Diogenes, and long before, people have suffered from the canine teeth of their neighbours. A good remedy, as well as preventive, in many cases, is a soft tongue.

[To the Editor of the Medical Times and Gazette.]

Sir,—The fact of "No Irish need apply," is well exemplified in there having been no answer given to the queries, more than once inserted in your valuable Journal, respecting the admission of the children of Irish practitioners to the "Propert" College, the condition of such privilege being, of course, an equivalent amount of subscriptions from the members of the Profession in this country. It cannot have been, that the letters of your Correspondents on this subject have not met the eye of some of the Committee of the intended Institution. I am, &c.
Cork. A Father of a Family.

In reference to the above, we applied to Mr. Propert, and received the following reply:—

Sir,—I am desired to acknowledge the receipt of your favour of the 3rd inst., enclosing a communication from an anonymous Correspondent, and to forward to you, in reply, the accompanying copy of the Laws of the College, by which you will perceive, in Law I., that the benefits to be conferred are confined to medical men practising in England and Wales.

I have the honour to be, Sir, your most obedient servant,

To the Editor, &c. Herbert Williams, Assistant Secretary.

We have submitted Dr. Burt's case to an eminent accoucheur.

The disgusting Edinburgh mattrass affair shall receive its due consideration.

[To the Editor of the Medical Times and Gazette.]

Sir,—On looking over the "Medical Times and Gazette" of April 24, 1852, I found a case reported by Mr. S. W. Sibley, of "Dislocation of the Sternal end of the Clavicle backwards." The case is certainly very interesting; but Mr. Sibley says, "it still remains unexplained why a force applied to the middle of the bone sufficient to dislocate the sternal end, should not have caused fracture." If Mr. Sibley will turn to the 285th page of "Ward's Osteology," he will there find an account of some experiments made by Mr. Ward on the elasticity of the clavicle, and which I think will fully explain to him why a force applied to the middle of the bone sufficient to dislocate it need not *fracture* it. The account of these experiments is too long for transcription; but the inferences Mr. Ward deduces from them are the following, viz., "That the clavicle possesses sufficient longitudinal elastic force to throw its own weight nearly two feet on a level surface, and sufficient transverse elastic force opposite to the centre of its anterior convexity to raise its own weight about one foot vertically." Mr. Ward further says:—"The clavicle is endowed with this remarkable resiliency on account of the frequency and violence of the concussions to which it is exposed, and also on account of its importance as a support to the upper extremity, and a defence to the large vessels and nerves which lie immediately beneath it." Hoping you will excuse the length of this communication, as it is on an interesting and important subject, and trusting you will give it insertion in the pages of your valuable Journal,
I am, &c. A St. George's Student.
P.S.—I enclose my card.

A Well-wisher is thanked, but his communication is unauthenticated; besides, the subject, however important, is not suited for a strictly medical journal.

[To the Editor of the Medical Times and Gazette.]

Sir,—In a public hospital in another country the following disgraceful scene positively occurred not many months ago:—A Dutch sailor, master of a small trading smack, was admitted in a dying state; and, as a Lutheran, was anxious to see the Protestant clergyman; but, the country being Roman Catholic, a priest was likewise in constant attendance. So greatly was the former interrupted in his duties, that an appeal was made to the municipal authorities; but, while the affair was pending, the poor patient's last moments arrived. While unconscious and *in articulo*, extreme unction was administered to him, and he died, a portion of wafer being introduced between the lips, which had then lost the power of swallowing. He was claimed as a Roman Catholic, and his remains were carried off in triumph to the cemetery. Do we desire such scenes in England? Are we discontented with the enlightened forbearance, combined with the pious zeal, which characterises our own clergy? Let us not retrograde, by opening the doors of our valuable institutions to over-zealous youths, who fancy that good intentions can make up for real knowledge, and that the subject of religious instruction, all important and most comprehensive, can be grasped by a few hours' light reading, and the hasty formation of premature opinion. His voice only should be heard in an hospital whose life has been devoted to the interpretation of that Book in which we all believe.
I am, &c. M. B.

COMMUNICATIONS have been received from—

Mr. Robinson, of Bodmin; An Eleven Years' Subscriber; Secretaries of the Epidemiological Society; Dr. Turley, of Worcester; The Registrar-General; Secretary of the Royal Institution; Dr. Johnson, of King's College Hospital, and Woburn-square; Dr. Todd, of King's College, and Spring-gardens; Mr. Ludlow, of Paternoster-row; Terra Firma; Dr. Seaton, of Sloane-street; Mr. Jones, of Liverpool; A Subscriber, York; A Well-wisher; Mr. Robson, of Warrington; Dr. Brown, of Chatham; Mr. Spence Bate, of Swansea; Dr. Merryweather, of Whitby; Mr. Moorman, of St. Columb; Dr. J. G. Burt, of Lostwithiel; A Young Practitioner; An Edinburgh Friend.

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By ROBERT B. TODD, M.D., F.R.S.,
Physician to the Hospital.

ON THE TREATMENT OF PNEUMONIA.(a)

Gentlemen,—We have lately had some cases of pneumonia treated with a highly favourable result, upon a plan which differs materially from that usually laid down by some of our highest authorities in the practice of medicine. I propose, then, in my present lecture, to make two of these cases the basis of some remarks on the treatment of pneumonia, with a view to solving the problem,—what is the best mode of treating this disease; that is, what mode of treatment is best calculated to lead to a speedy resolution of the inflammation, with least injury to the patient's constitution, and with the shortest convalescence.

I will just observe, *in limine*, that the plan of treatment which I have pursued in the cases now convalescent, as well as in many others, consists, not in the use of remedies directly antiphlogistic (so-called), that is, of remedies intended directly to knock down inflammation by withdrawing blood, the supposed fuel of all inflammation, and by reducing vital power; but in the employment of means which will promote the free exercise of certain excretory functions by which the blood may be purified, and certain matters may be removed from the system, which, remaining in it, tend to keep up a state very favourable to inflammatory affections. The remedies to which I refer tend to promote the free action of the skin and of the kidneys, and in a less degree that of the intestinal mucous membrane; whilst, at the same time, a free stimulation is maintained of that part of the skin which is near the seat of the pulmonary inflammation; and an essential part of this treatment is, that while these remedies are being used, we do not aim at reducing the general powers of the system, but rather at upholding them by such frequent supplies of nourishment, easy of assimilation, as may be readily appropriated; and when necessary, even by the administration of stimulants,—on this principle, that the free exercise of two such great excretions as come from the skin and kidneys, would, if fed only from the tissues and the blood, (without the introduction of fresh supplies,) necessarily weaken and exhaust the general powers of the patient to an extent inconsistent with the full exercise of the process of repair needed by the inflamed organ.

Some physicians have drawn a distinction between cases of pneumonia, which is very useful with reference to treatment. There are, they say, two classes of cases of pneumonia: the one sthenic; the other asthenic and typhoid; the former capable of bearing the most active antiphlogistic treatment, and for which, indeed, they say, that that treatment is absolutely necessary; the latter requiring a supporting and even a stimulating plan, and for which an antiphlogistic plan would be extremely hazardous and dangerous. Now, while I fully recognise and admit the great practical value of such a distinction as this, I must remark, that it seems to me that it ought to be expressed differently. I would say, that all cases of pneumonia have, independently of this or that mode of treatment, a decided tendency to depress the general powers of life—some more—some less; and that, with all, a very decided direct antiphlogistic treatment is hazardous,—with some extremely so,—and that in none is it absolutely necessary; but, with others, there is no safety for the patient, unless the treatment from the beginning be of a decidedly supporting and stimulating nature.

You will note the distinction which I make between remedies *directly* and *indirectly* antiphlogistic. The former is a class of remedies whose supposed efficacy is founded upon a notion, (an erroneous one, as I think,) namely, that certain acute and sthenic inflammations are attended with an undue exaltation of the vital forces, both local and general, and that these must be depressed before the inflammation will yield. I say, I think this view erroneous, for while I would readily concede, that in pneumonia there is an exaltation of vital force at the inflamed part, it seems to me quite plain, from the clinical history of the malady, that the local inflammation draws so largely upon the rest of the system as to depress the general powers of life; else, whence the weakness, the exhaustion, the failure of appetite, the wasting, which take place in the course of the disease, even when favourable, independently of any particular line of treatment?

The remedies indirectly antiphlogistic are those by which it is professed to promote and exalt some particular functions, as sweating, or some other secretion, and thereby to purify the blood, by eliminating noxious matters through those channels, and by such purification of the blood to reduce or remove febrile symptoms.

The first of the two cases to which I shall refer to-day, is that of Edward Mills, aged 28, (Vol. XXXII., p. 88.) He is a railway porter,—a good specimen of a strong, athletic man, of active habits, and accustomed to hard work, and, at the same time, evidently a person who has been well fed. In short, he is a person just adapted, by constitution and habit, to bear antiphlogistic treatment, if such were necessary.

On the 3rd Jan., 1851, he was seized with shivering, headache, shortness of breath, and cough, soon followed by the occurrence of a sharp pain in the left side, particularly upon taking a deep breath, and all this accompanied by loss of appetite and fever. The next day he began to expectorate a quantity of very viscid and rusty mucus, and the breathing became more rapid, and the cough more frequent and troublesome; and on the 5th he came into the hospital.

The character of the sputa at once attracted our notice; and those of you who came round with me will recollect, that I particularly directed your attention to its extreme viscidity, and showed you how it adhered to the vessel in which it was received; so much so, that I could turn the pot upside down without the least displacement of its contents. We likewise observed the peculiar rusty colour of the sputa. The matter expectorated in such cases looks exactly as if it had been mixed with iron rust. The peculiar colour is caused by the admixture of a certain amount of the coloured particles of the blood, which may be seen in it through the microscope. The mixture is evidently very intimate; there is, in fact, in these cases, a hæmorrhage, doubtless from the naked vessels of the pulmonary air-cells. But the appearance and colour of the sputa differ very decidedly from those of the expectorated matter in ordinary cases of hæmoptysis. I think the difference is to be explained thus: In pneumonia, a copious secretion of mucus takes place from the membrane of the extreme bronchial tubes or bronchial passages; and, blood escaping from several very minute vessels, becomes intimately intermixed with the mucus, and gives it its rusty colour. The escape of blood and the secretion of mucus take place simultaneously, and in about equal proportions, and are dependent on the same cause, namely, that which irritates the lung. But in hæmoptysis the escape of blood is independent of any secretion of mucus, and often takes place without it, and the quantity of blood is always greatly in excess of that of mucus.

When present, this viscid and rusty state of sputa is a pathognomonic sign of pneumonia. Indeed, the great viscidity alone, even without any red colour, but with a yellowish bilious hue, ought always to excite our apprehension, lest pneumonia may be commencing. Passive congestion of lung, such as we may meet with in low fevers, or in heart disease, will, however, sometimes give rise to sputa not unlike those of pneumonia, but to be distinguished from them by their being less viscid, and containing more blood, which is much less intimately mixed with the mucus.

(a) Lect. XXX., delivered May, 1851.

Although the rusty and viscid character of the sputa will often enable us with certainty to diagnose the presence of inflammation of the substance of the lung, we must not conclude, that the absence of this characteristic expectoration is a positive proof against the existence of pneumonia. Many cases of pneumonia pass through all their stages, and resolution takes place, without the occurrence of any expectoration, or with that of a very trifling amount of colourless mucus. In the cases of typhoid pneumonia, it is not uncommon to find, that the patient does not expectorate, probably owing to his weak and sluggish state, his sensibilities being much blunted.

We found that our patient exhibited certain well-marked constitutional symptoms. He had a flushed face, and a hot and dry skin, and a tongue coated with a thick, white fur. He also complained much of thirst, and of a troublesome cough, and he suffered from a shooting pain in the left side below and a little in front of the scapula, and extending over the shoulder, which impeded his breathing, and was increased by deep inspiration. At the same time there was no very great increase in the quickness of pulse (it was 96), but the respirations were much more frequent than in health, being 36. The pulse was full and strong, and such as would have, not only justified, but invited bleeding, if we allowed ourselves to be influenced by that single symptom in adopting such a line of treatment.

A careful examination of the chest at once enabled us to determine the exact nature of the evil under which this patient was suffering. By percussion and auscultation we found a normal state of the right lung, the breathing being, however, rather more intense (puerile) than in health. On the left side, the percussion sound was quite natural in front, and good vesicular breathing was audible. Such, likewise, was the case all over the scapular region behind; but at the base of the left lung, all about the region to which he referred his pain, a decidedly dull sound was elicited by percussion. Now, this dulness of percussion may arise, as you know, either from an effusion of fluid between the pleural membranes, or from a thickened state of pleura, or from a condensation or such other alteration of the lung as prevents its free distension by air. When fluid is interposed between the pleuræ, the vibrations excited in the lung by the voice are not propagated to the wall of the chest, unless in cases where some old bands of adhesion serve to connect the surface of the lung to the costal pleura. In the present instance, the vibrations were sensible to the hand over the dull surface, and, therefore, we had to seek for some other cause for the dulness, besides pleuritic effusion.

There was no history of any former attack of pleurisy; therefore it was improbable that there could have been any thickened state of pleura. We found, however, a decided modification of the voice and breathing, which sufficiently accounted for the dull percussion. There were both bronchophony and bronchial breathing. Both these conditions occur only in a solidified state of lung; and when accompanied by viscid, rusty sputa, and the train of symptoms which we found in our patient Mills, we have no hesitation in referring the solidification to the effusion of plastic matter into the air-cells of the lung, which likewise serves to exclude the air from them.

The seat of the effusion of plastic matter in pneumonia is in the fine air-passages within the lobules of the lung, the inter-lobular passages being free. The air, therefore, in inspiration, rushes through these tubes; and the vibrations which it excites on the walls of the tubes are readily propagated by the solid lung to the surface, and thus the phenomenon of tubular or bronchial breathing is heard—a sound similar to that which one may cause by simply blowing into a tube, or of which you may get a natural example by applying the stethoscope over the larynx and trachea in the neck.

And in bronchophony, it is as if the vocal sounds were generated in the air-passages—the voice seems to come from the lung. The fact is, that the vibrations excited at the vocal cords in the larynx are propagated along the walls of the bronchial tubes; and, instead of being diffused through the soft, spongy lung, as in health, they are conducted in full force to the thoracic wall by its solidified portion.

You must not lose sight of the fact, that bronchial breathing and bronchophony are present whenever a part of the lung is solid, whatever be the cause of the solidification, provided only a great portion of the bronchial tube is pervious. Thus it is that we often find these signs when tubercular deposit has solidified a greater or less portion of lung. Sometimes pneumonia, running an insidious and chronic course, will make the lung solid, and develope these signs; or cancerous deposit may have been slowly taking place. To determine, then, the exact signification of these signs, you will have again to call in the aid of the history of the symptoms of the case.

You may have bronchial breathing when a slight pleuritic effusion has taken place; but such bronchial breathing will be accompanied, not with bronchophony, but with œgophony—a state of voice resonant and bronchial in its character, but rendered bleating by the interposition of a thin layer of fluid between the costal and pulmonary pleura. The existence of this modification of voice, and the simultaneous absence or great diminution of the usual vocal vibration, when the hand is applied closely to the wall of the chest, will distinguish the bronchial breathing which is accompanied by pleuritic effusion, from that which is due to the simple condensation of pneumonia.

Thus, then, the percussion which we first practised on making our physical examination of the chest directed us to the seat of the lesion; and from the bronchial breathing, the bronchophony, the rusty expectoration, the local pain, and embarrassed breathing, and the febrile disturbance, we diagnosed with confidence and certainty that the lower lobe of the right lung was in a state of inflammation, and had passed rapidly into hepatization. It is probable, too, that the inflammation of lung was accompanied by some degree of pleurisy. Of this, however, we had no certainty; but three circumstances rendered it probable; 1st, because the local pain was sharper than it usually is in pneumonia; 2ndly, because on one day the bronchophony was decidedly œgophonic in character; and, 3rdly, because pneumonia but rarely occurs without some degree of pleurisy affecting the pulmonary layer of the pleura.

The portion of lung involved in the inflammation was rather more than one-third of the posterior part—the inferior third; and the inflammation extended half-way, or possibly two-thirds forwards, towards the anterior surface of the lung. This was also the case in the second example of this disease which I shall bring before you to-day.

It is a remarkable feature in the clinical history of pneumonia, how prone it is to attack the lower part of the lung, and how much more frequently the posterior part is affected than the anterior, and how often the inflammation involves only a portion of one lung, and that portion not exceeding one-third or one-half, not often reaching to the anterior surface, and seldom extending to the entire lung. I know of no satisfactory explanation of its partiality for the posterior and inferior part. Perhaps dependence of position, as likely to affect the circulation, may have something to do with it. The extent of the inflammation, and, perhaps, in some degree, its position, ought always to be taken into account in forming a prognosis. If only a portion of one lobe is affected, recovery is much more frequent than the reverse, if the treatment has not been of a too depleting nature; should the whole of one lobe be involved, or more than half the lung, the chances of recovery are much diminished; and, should the inflammation engage the whole of one lung, the disease is very frequently fatal. When the pneumonia is seated in the upper lobes, the chances of recovery are much less than when it occupies the lower lobe. This is partly because when the disease attacks the upper lobe it is of a more asthenic nature, and partly also because this part is most apt to be affected in old persons. The clinical fact is highly deserving of your attention, and ought to exercise an influence upon your treatment.

Treatment.—Now, the treatment to which this patient, and the other whose case I shall presently detail, were subjected, consisted in the free application, to the back and side over the region of the dulness, of flannels soaked in warm spirits of turpentine, which were kept on for half an hour. These stupes were applied at three several periods of the day for the first three or four days. They excited considerable irritation and redness of the skin. At the same time a diaphoretic medicine was administered, consisting chiefly of the liquor ammoniæ citratis, of which as much as six drachms were given every three or four hours; at the same time an occasional dose of a mild aperient medicine was given, and the patient was allowed a pint of beef tea daily, with a little milk and bread.

Let us see, then, the progress of the case under this treatment.

The patient, you will remember, came in on the 5th of January, which, reckoning from the date of the first appearance of rigor and pain, was the third day of the disease.

On January 6, he was much the same as on his admission. Pulse, 96; respirations, 36.

On the 7th, a small patch of herpes was noticed at the right angle of the mouth. Pulse, 90; respirations, 36. A decided crepitation is heard at the end of each inspiration, although the breathing remains tubular; sputa abundant and less viscid.

On the 8th,—pulse, 80; respirations, 40;—the dulness, on percussion, less extensive; the returning crepitation is now audible over the whole of the region of inflamed lung; fever less; tongue cleaning; the pain in the side being troublesome, ten leeches were applied.

Jan. 9th, (seventh day of the disease).—The pain much relieved; bronchial breathing completely replaced by crepitation. Pulse, 96; respirations, 30.

On the 10th, the skin moist and soft; sputa no longer rusty; crepitation audible on deep inspiration, and the voice slightly resonant beneath the scapula. Pulse, 60; respirations, 32.

On the 12th, the crepitation being still present, a blister was applied to the side; and, on the 13th, it was reported that the breathing was nearly pure, crepitation having almost disappeared. Pulse, 68; respirations, 28.

On the 17th, fourteen days after the first seizure, our patient was quite convalescent.

Case 2.—The second case is that of a lad named Minns, aged 17, a waiter at a coffee-house. In his vocation he is a good deal exposed to cold, but his health has always been very good. His illness commenced on February 8th, with shivering, loss of appetite, cough, pain in the right side, and vomiting. In this case, the signs were of the same character as in the former, but were situated in the lower part of the right side. There was similar acceleration of pulse and breathing. The percussion was dull over the lower part of the right lung behind, where also there was a total absence of vocal vibration. In other parts of the chest the breathing was pure, and the percussion resonant.

Let me remark here, that, in watching cases of acute chest disease, it is very important to note the frequency of the pulse and respirations, as furnishing one of the most useful guides in the progress of the case; when matters do not go right, you find the frequency of pulse and breathing increase from day to day, or remain stationary; but if, on the other hand, you find a gradual fall in the frequency of the pulse and breathing, you may feel sure that your patient is making satisfactory progress.

These physiological signs are not inferior in importance to any afforded by the patient in the course of his malady; and you may even trust to them alone, when they take the favourable course, to assure you, in the first instance, that the disease is not extending itself, and afterwards, that the inflammation is being resolved.

The diagnosis of this second case differed from that of the first in this,—that, inasmuch as, in addition to the dulness on percussion, the usual vibrations excited by the voice were not felt when the hand was applied to the chest, there must have been fluid interposed between the lung and the pleura, to prevent their propagation to the walls of the chest; whence we concluded, that a slight pleuritic effusion accompanied the hepatisation of the lung.

The progress of this case, under the same treatment as that applied to the first, was equally satisfactory.

Thus, he came in on the 10th of February, on the third day of the disease; his pulse was then 118; his respirations, 38.

On the 11th, the pulse was 128; respirations, 34.

On the 12th, (the fifth day of the disease,) we find the pulse still high, 120; and respirations, 40. There was, however, a manifest improvement in the physical signs. The vocal vibration was now to be felt, showing that the pleuritic effusion had been absorbed. Slight crepitation began to be audible near the base.

On the 13th, the pulse had fallen to 96, but the respirations were still as high as 42.

On the 14th, the seventh day of the disease, the pulse had fallen still lower, and, what was more important, the frequency of the breathing was reduced to 32; crepitation was now distinctly audible over the whole of the diseased portion of lung.

On the 15th, the crepitation had become much larger and moister, and a good deal of vesicular breathing was audible at the lower part of the lung; and on the 17th, (the tenth day of the disease,) all traces of crepitation had disappeared, and the dulness, on percussion, had diminished; the pulse was 78, and respirations, 29.

Four days afterwards the patient left the hospital, quite restored to health.

Here, then, are two cases which I think you may take as examples of pneumonia, or, more correctly, of pleuro-pneumonia, of an average amount of severity. They were by no means of what is commonly called the asthenic or typhoid kind. The first, indeed, was distinctly sthenic; and the patient was a strong, athletic, muscular man, just such a one as you might bleed without much hesitation. The other patient was not of so vigorous a frame; but still, neither his constitution nor his symptoms were such as would have justified our regarding the case as asthenic.

Yet you will observe, that, in the first case, the inflammation was fairly undergoing resolution on the seventh day of the disease, and, on the eleventh day, the lung was in its natural condition; on the fourteenth day the patient was convalescent. In the second case, resolution was fairly established likewise on the seventh day of the disease, and on the fourth day of the treatment; and pure breathing was audible on the tenth day. A fortnight, likewise, was sufficient to restore this patient to complete convalescence. It is remarkable, that, in both cases, the resolution should have taken place on the same day of the disease; but then it must be noted that, in both, the treatment began on the same day, namely, the third from the seizure.

Now, I have brought these cases before you as good illustrations of the progress of the disease under a mode of treatment which I have found most successful in a considerable number of cases, both in hospital and private practice. This mode of treatment differs very considerably from that laid down by some of our best authorities as that which ought to be pursued in pneumonia. I have described in what that treatment consists. But I am quite prepared to hear it objected, that such a treatment is really doing nothing but leaving the disease to take its own course. Well, and if that course be to recovery in a short time, and at no expense to the powers of the patient, can we adopt any plan better suited to him? But I do not admit that the frequent application to the chest of such counter-irritants as mustard or turpentine, (three or four times a day,) and large doses of the acetate or citrate of ammonia, and occasional purging, exercise no influence, either upon the whole system or upon the local disorder. The drugs cause, undoubtedly,—and especially when the patient is kept in bed—free sweating or free diuresis, and often both; and it is quite consistent with all experience, that frequent counter-irritation exercises a beneficial influence on internal inflammations, and relieves pain. I prefer the frequent application of such stimulants as mustard and turpentine to that of blisters, as being quicker, and, on the whole, more efficacious and less weakening.

Now, in the particular cases under consideration, a manifest check to the advance of disease took place immediately the treatment was begun, and the signs of resolution followed very speedily; and I have already alluded to the curious fact, that the resolution in both cases was established on the same day of the disease, the treatment having likewise commenced on the same day,—a fact which seems very much to indicate that the treatment had a good deal to do with the early resolution of the inflammation.

Now, in estimating the value of this or that mode of treatment in any given disease, we should ascertain what are its natural tendencies—to recovery or to death. Is it a very fatal disease? When recovery takes place, what is the process? When death occurs, what are the immediate antecedents, and what its immediate causes?

These are points of clinical history, upon which our returns are, as yet, far from being complete or exact. The numerical returns which we have respecting this disease are unsatisfactory, because, in those returns, all cases of pneumonia, whether asthenic or otherwise, and whatever be the quantity of lung involved in the inflammation, are classed together. Suppose you were making inquiry respecting the results of treatment in cases of burns, how little information could you derive from numerical returns, if the cases were not classified according to the extent of surface involved in the burn! It is just so with pneumonia; we have as yet no classified re-

turns; but, looking to general experience and such numerical returns as we have, it may be stated, that, as in burns, pneumonia is fatal in proportion to the extent of pulmonary surface involved; but that, in the cases where one-fourth or a less portion of lung is inflamed, it has on the whole a very decided tendency to recovery. On the other hand, when all one lung is involved, or when a considerable extent of both lungs is engaged, the tendency is as decidedly to a fatal result.

The fatality of pneumonia, too, is very much influenced by the period at which the disease may have been detected, and some kind of medical treatment adopted. Thus, Grisolle's tables show that, when the cases were brought under treatment within the first three days, only 1-13th died; but if not brought in before the fourth day, 1-8th died; if on the seventh, 1-3rd; on the eighth, so large a proportion as ½ died. Age, likewise, exercises an important influence, and there can be no doubt that (excluding infancy, respecting which our facts are of the most unsatisfactory nature,) the mortality increases with the age; and at the advanced periods of life pneumonia must be regarded as a very fatal disease.

There are those who think, that when pneumonia affects the apex of the lung, it has a more fatal tendency than when it affects the base. I myself lean very much to this opinion, and because (without referring to complication with tubercles) in such cases, the disease is generally of the low or typhoid character; nay, under such circumstances, the pneumonia may be erratic, and, like erysipelas, pass from one to another part of the same lung.

It may, indeed, I think, be laid down, that in all these cases, the pneumonia has a fatal tendency in proportion as it tends to exhaust, whether by its extent or by the vital powers of the patient too readily succumbing, or by the exposure to cold, or by mental or bodily exertion during the early stages of the disease, or by some powerfully depressing influence connected with the original exciting cause of the disease.

But if you take cases of pneumonia occurring in persons in the full vigour of life, and not involving a very large portion of the lung, and coming under treatment early, we may regard it as a disease of not very fatal tendency, but rather very prone to get well when the vital powers of the patient have not been too much depressed; and such cases will get well whatever be the treatment early adopted, provided no great error has been committed in either direction —either in that of stimulating too freely, or of reducing too much. What we have to do in such cases is, to adopt the treatment which favours the shortest convalescence, and in the more severe cases we have to discover a mode of treatment which will promote the reparative process and uphold the powers of life.

The plan of treatment which has been recommended by some of our highest authorities, I need not tell you, is that by bleeding and tartar emetic. You bleed early from the arm, and if necessary you bleed a second or a third time; and if under this treatment resolution does not speedily take place, you bleed locally by leeches or by cupping, and likewise give tartar emetic more or less freely; to all which counter-irritation may be superadded in the more advanced stages.

I have had ample experience of this treatment; and I must confess, that that experience has so little satisfied me with it that I have for some years ceased to adopt it; for, under this treatment I have seen too many die; and when recovery has taken place, in too many instances has it been with a tedious, lengthened convalescence. Indeed, of all the fatal cases which it has fallen to my lot to witness, the great majority have been treated in this way; and in most of them antiphlogistic treatment had not been carried to an excessive or unreasonable extent.

In bleeding, the difficulty is to determine how much blood you may safely take away. Upon this point, I think all who view the matter candidly must acknowledge, that we have no satisfactory rule, notwithstanding the immense experience we have had of the practice. A loss of blood which scarcely makes an impression on one man will seriously reduce another; or a patient, who in a former illness has borne bleeding well, will suffer from it very much on a subsequent occasion; or losses of blood which were borne with impunity in one epidemic are injurious in another. All these are difficulties against which the greatest tact and judgment find it difficult to contend. And, although in particular cases relief may be afforded to certain symptoms by a timely bleeding, there is no doubt that in many it exercises no real influence in checking the progress of the disease; for, notwithstanding early bleeding, the lung becomes fully hepatized.

And as regards tartar emetic, I have long noticed, that patients do best when the drug neither sickens nor purges. On this subject, I am glad to fortify my own opinion, formed independently, by those of two such excellent authorities as the late Dr. Thomas Davies and Dr. Watson. Dr. Watson, alluding to Dr. Davies, says: "He states, and this is accordant with my own experience of the remedy, that the tartar emetic always acts best when it produces no effect except upon the inflammation itself; *i. e.*, when it does not cause vomiting, or purging, or a general depression of the powers of the system." When, indeed, you can insure your patient against these effects of the drug, it is a very safe and useful remedy in pneumonia; but the difficulty is to limit its action in this way. This may be done entirely as regards its depressing effects, by combining opium with it, and the combination often exercises a very good effect.

I had asked myself, why does this combination of tartar emetic and opium often tell so favourably in pneumonia? and the conclusion which I came to was this,—because it tends very decidedly to promote sweating, and perhaps other excretions; and I was thus led to try drugs of a like tendency, such as the liquor ammoniæ citratis or acetatis, in large and frequently-repeated doses, which do not exercise any depressing influence upon the patient. In pursuing the treatment, you must be careful to give full doses—six or eight drachms, and to repeat them every three or four hours; and you must diligently apply, two or three times a day, or more frequently, counter-stimulants over a large extent of the surface of the chest, such as mustard, or large flannels soaked in warm spirits of turpentine. With this you may often safely and with advantage combine the use of opium, with or without calomel; and now and then a mild aperient will be necessary.

Under this treatment, deaths from pneumonia have become extremely rare among my cases. The fatal cases are those of patients who come in far advanced in the disease, or in whom the disease has rapidly invaded a large surface of one or both lungs; but even such cases often do well under this treatment, combined with support and stimulants.

In all the cases, I am careful to give support from the first, in the shape of animal broths in small quantities, and at short intervals, and sometimes a small amount of stimulus.

In the decidedly typhoid cases, I need scarcely say, that the free use of stimulants is of essential service; and it is often of immense advantage to give quinine freely, the special indication for this latter drug being profuseness of sweating.

Pneumonia often comes on in connexion with rheumatic fever, or in a highly rheumatic or gouty diathesis. Such cases bear ill the bleeding and tartar emetic system, but are particularly well suited for this plan which I now recommend to you, and in them opium may be freely used with very great advantage.

I had almost forgotten to allude to a very interesting point which we observed in both these cases, viz., that during the stage of hepatization the chlorides had disappeared almost completely from the urine, but returned to it on the re-appearance of large crepitation, and on the resolution of the inflammation. This curious piece of chemical history was first pointed out by Redtenbacher, who records the results of his observations of it in eighty cases in a paper in *Hibra's Zeitschrift der K. K. Gesellshaft der Aerzte.*

I forbear from any further remarks on this subject, because my friend Dr. Beale is engaged in repeating the experiments, and with other observations on the chemistry of the sputa and of the blood in pneumonia, which, I have no doubt, will, ere long, furnish us with some very interesting results.(a)

(a) That I am not singular in feeling much dissatisfied with the bleeding and tartar emetic treatment in pneumonia, I infer from the fact, that this mode of treatment has been, as I am informed, quite given up at the great Clinical Hospital at Vienna. The curious paper of Varrentrapp, of Frankfort, in *Henle's Zeitschrift*, which I did not see till long after this lecture was delivered, indicates that that able physician had no particular liking for the treatment in question. Varrentrapp adopted the treatment of pneumonia by the frequent inhalation of chloroform in small quantity, but not to such an extent as to cause insensibility. The most frequent immediate effect of the treatment was perspiration and reduction in the frequency of the pulse. The results of the treatment appear to have been highly favourable. An able analysis of Varrentrapp's paper was published in the *Medical Times*, Vol. XXIV., 1851.

ORIGINAL COMMUNICATIONS.

PRACTICAL OBSERVATIONS ON DISEASES OF THE EAR.

WITH RECORDS OF CASES TREATED AT ST. MARK'S HOSPITAL, DUBLIN.

By W. R. WILDE, Esq., F.R.C.S., Etc.

(Continued from page 439.)

No. 20.—CONDYLOMA OF THE EXTERNAL MEATUS.

M. D. L., female, 25, a seamstress, suffers from deafness, tinnitus, occasional pain, fetid and sometimes bloody discharge from left ear for eight months; is otherwise healthy; attributes her affection to cold. The external meatus is completely closed by several condylomata which grow around its margin, but particularly from its lower edge. They are rather sensitive to the touch, lobulated on their surface, project a considerable distance beyond the margin of the aperture, and are a little more florid in colour than the natural skin. When the tragus is pressed backwards with the finger, a muco-purulent and offensive discharge exudes between these growths. It is not possible to insert even a small-sized speculum into the meatus without causing great pain and irritation. She could only hear the watch on touching. The right ear was normal. They were touched with the solid nitrate of silver, after which a poultice was applied. The subsequent treatment consisted in washing over the morbid growths with a strong solution of nitrate of silver every second or third day, and, in the intermediate time, keeping a dossil of fine lint, wet with diluted liquor plumbi, applied to the concha, besides the internal administration of Plummer's pill and sarsaparilla. By persisting in this treatment for upwards of two months, the condylomata disappeared, leaving the meatus natural, when the membrana tympani was found unimpaired, and the hearing was restored.

I have seen a case of cutaneous cancerous ulceration, extending from beneath the zygoma, which had quite eaten away the tragus, completely occluding the external meatus; but one of the most common causes of the disease are eczematous and herpetic eruptions, and chronic erysipelas, as detailed in the two subsequent cases.

No. 21.—ECZEMA AURIUM, THICKENING AND CLOSURE OF MEATUS AUDITORIUS EXTERNUS.

M. Q., female, 60, has been deaf, "off and on," for several years past, accompanied by noise and wandering pains in her head, with extreme itchiness in the auditory passages. The skin covering the auricle, and the scalp adjacent thereto, is of a fiery, red colour, speckled with patches of yellow, formed by the exudation which has collected in thin branny scales all over it. The parts are hot, and in some places sticky, from a thin ichorous matter which exudes from the surface. The auricle has lost its natural shape, its folds and sinuosities being partially obliterated, and it has become hard, thickened, and lumpy. The external auditory aperture has, owing to the disease extending into it, been lessened to a third of its natural size, and it is filled with a branny scurf. Upon removing the latter impediment, we can obtain but a very partial view of the membrana tympani, which appears to be thickened and opaque. Hearing distance, touching. The state of the parts are nearly the same on both sides.

In examining diseases of the external meatus and auditory tube, I find a small silver instrument, shaped like a blunt gorget, very useful.

Cases of this description, and, like this, of long standing, are very hard to manage, because there generally co-exists some constitutional taint, as shown in the cutaneous eruptions often manifest in other portions of the skin, and because the parts now under consideration have become so much altered in form and texture, that it requires a long course of treatment to restore them to their natural condition, and thereby re-establish their usual functions. The disease principally occurs in females of middle and advanced life; but it also happens to children from six to twelve years of age. In the latter, however, it is of a much more active nature, at the same time that it is much more amenable to treatment. In young persons the eruption often co-exists with scald head, and in both young and old, if the disease is allowed to exist for any length of time, it extends into the meatus, and even over the surface of the tympanal membrane, which it thickens and renders opaque. In old persons a collection of branny scales accumulates in the external tube. In young persons a thick creamy discharge will generally be seen coating over the lining of the tube and the external layer of the membrana tympani.

Cleanliness and attention are indispensable to the eradication of these affections. In the first instance, continual poulticing with any emollient substance which keeps up heat and moisture is necessary. Linseed meal, boiled bread and milk, or well-mashed turnips, will be found useful applications. Afterwards, when the extreme heat, swelling, vesication, and redness have subsided, a solution of the liquor plumbi, in the proportion of a drachm to the ounce, applied with several bits of fine lint, so as completely to envelope the auricle, and the evaporation prevented by covering over the whole with a piece of oiled silk or thin gutta percha, rarely fails to lessen the irritation and reduce the parts to a healthy condition. But while we employ these local measures, we must not neglect constitutional means. Strict attention to diet should be enforced; salt meats, savoury dishes, and pastry ought to be avoided, and a sufficient quantity of fresh vegetables should be consumed at dinner. After the patient has been well purged, a course of Plummer's pill may be prescribed with advantage—at least, five grains daily for an adult; and, in a little time, some of the preparations of sarsaparilla administered in lime water will hasten the cure, and assist to eradicate the disease from the system. This affection is very apt to relapse, and we should therefore continue both our local and constitutional remedies long after the inflammatory symptoms have subsided. Old ladies think they never can have a sufficient amount of warmth about their head, and it is very difficult to induce them to leave off even one flannel nightcap; but we should at least make the attempt, as the head and ear ought to be kept as cool as possible. As the swelling and inflammatory symptoms subside, we should again turn our attention to the state of the auditory tube. If any discharge exists, the meatus should be syringed gently with tepid water daily; and both it, the concha, and the tympanal membrane, washed over every second or third day with a solution of nitrate of silver of the strength of at least twelve grains to the ounce. Still more advanced in the progress of the treatment when the exudation has completely ceased and the thickened cuticle has been quite removed, much benefit will be derived from smearing over the tube and membrana tympani with brown citrine ointment every third or fourth day. This latter remedy, in which I have great faith in all diseases similar to that which we are now considering, should be made with either rape or cod-liver oil instead of the lard or butter usually directed in the Pharmacopœias. It is then of a much darker colour, and never becomes hard or crumbly. It should be applied in a melted state with a camel's-hair pencil, and diluted by about one-third of almond oil.

No. 22.—CHRONIC ERYSIPELAS OF AURICLE.

T. M., female, 52, has had frequent attacks of erysipelas of her head and face during the last five or six years. The effects of the disease are, however, now manifest only in the external ears, but more particularly the right. The auricle is not much enlarged, but has become hard, inflexible, and resembles a piece of wet, thick sole leather; its fossæ being apparently filled up by subcutaneous deposit. It is also somewhat shortened in its antero-posterior diameter. The skin is of a dusky brown colour without any exudations, eruptions, or crusts upon it, but to the feel it is lumpy and nodulated, like what we find in certain forms of elephantiasis. The lobe in particular presents this thickened appearance. The disease has extended some way in front of the site of the tragus, which is also thickened and lumpy. The meatus is nearly

closed. The treatment of this disease is very similar to that of the foregoing.

Dr. Kramer relates cases of scirrhous degeneration of the auricle, but it would appear that he has applied the term to cases similar to that now under consideration.

Enlargement of the sebaceous follicles in the concha frequently present in pale, cachectic persons labouring under aural diseases. They are easily recognized by their dark heads, and can be pressed out with a pair of forceps. Besides those eczematous eruptions, which I described in Case 21, many other cutaneous diseases affect the auricle, particularly in children. You are all aware of the excoriations which take place in infants behind the ears during dentition, and of the popular belief that they are salutary. Cleanliness is their chief cure when it is advisable to heal them up. We have a disease in Ireland so prevalent in some counties, that it would appear to be one of our national maladies—*pemphigus gangrenosis*, first described by the late Dr. Whitley Stokes, and of which I have given a description in the medical memoir attached to the Census of 1841. So fatal is this disease among children, that no less than 17,799 deaths have been attributed to it in ten years; and as it is a disease very well known to the lower orders, I am inclined to think that the amount has not been exaggerated. It goes under different local names, but the most common are "mortifying hive," "burnt hole," and "black ear;" the latter from its so frequently appearing behind the ears and upon the auricles. In the Irish it is styled *ithcheadh*, or the eating disorder, from its phagedænic character. The vesicles, or bullæ peculiar to this affection, generally leave an indelible irregular lace-like depression, similar to that of vaccination.

No. 23.—ANOMALOUS TUMOUR IN THE EXTERNAL MEATUS.

M. N., female, aged 47, has been deaf of the right ear for many years, and is much annoyed by itching and a stuffed feeling in the meatus. Upon inspection we find a tumour in shape, size, and colour resembling a half-ripe mulberry, occupying the anterior and lower edge of the meatus, and extending some way into the auditory tube, which it almost completely blocks up. It is not unlike that disease known here as button scurvy, and to which the late Dr. Wallace of this city gave the name of *morula*. It is attached by its broad base throughout its whole extent, and has neither enlarged nor extended for the last three years, during which time I have been in the habit of examining it occasionally. The patient never had otorrhœa, and there is no discharge now present, but occasionally the tumour becomes painful and irritable, and then its colour deepens from a florid red to a purple. It is now of a firm consistence, corrugated on its surface, and has a firm unyielding feel, quite unlike a nævus, for which at first sight it might be mistaken. I will not meddle with this tumour at present, as I once saw an affection very similar in appearance in a lady about this woman's time of life, end in frightful cancer, apparently from an endeavour to remove it by escharotics.

We meet with various other growths in the external meatus and auditory tube, independent of polypus or other morbid products, resulting from inflammation or its consequences. One of the most frequent of these is exostosis, of which I have seen very many examples. The projection generally grows from the posterior edge of the osseous portion of the tube, and slowly, but gradually, projects forwards, so as to leave but a slight crescent-shaped fissure between it and the anterior wall of the meatus. The integuments covering such growths are generally very smooth, white, and polished. I have never seen this disease affect both ears, but I have often remarked it in connexion with inflammatory affections both of the external tube and the membrana tympani. Autenrieth has given an account of one of these growths, and lately Mr. Toynbee communicated a valuable paper on the subject to the *Provincial Medical and Surgical Journal*. We had lately at the hospital a young woman in whom the external meatus was closed by a dense membrane, through which, when an incision was made, a probe introduced into the wound came in contact with the bone. As the patient had never heard on that side, and had never suffered from any aural disease in infancy, as well as from the circumstance of there being no bony meatus, we must consider that case as one of congenital defect, of which there are several similar examples on record. I have on two occasions, in private practice, seen a stricture of the auditory tube at the junction of the membrano-cartilaginous and osseous portions, in one instance so small as only to admit the round extremity of an ordinary dressing probe. Hardened cerumen having accumulated behind it, it was with great difficulty removed.

UPON THE CRANIAL BONES OF THE ANENCEPHALOUS FŒTUS.

WITH REMARKS UPON THEIR DEVELOPMENT.

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The greater number of observations upon the developement of the bones of the skull are unconnected and devoid of system, having been compiled from examinations of the embryonic skeleton of the mammalia, without reference to any one primitive form or archetype. I doubt if the science of anatomy be advanced by such assertions as the following: "In the human embryo of the seventh month, Meckel has enumerated thirteen points of ossification to the os sphenoidale," etc. The construction of the skull admits of the indication of the essential vertebral elements of each bony ring with the same precision as do the segments of the spinal column; and the homological signification of each part remains unchanged, whether it be developed from one or from several points of ossification. The two ossa parietalia constitute a neural spine. Pre-eminently distinct in man, but united into a single piece in many carnivora, they do but repeat in the head the "spinous processes" of the vertebræ of the trunk. The spines of the hæmal arches are developed from pairs of the ossifying points arranged in linear series; their early coalescence to form the broad, flat sternum has given rise to the present erroneous idea of this piece of the skeleton, by which it is classed under the head of "flat bones." Each os temporis is composed of five bones—the mastoid, the squamous, the tympanic, the petrosal, and the styloid. The sphenoid is composed of ten bones—the basi-sphenoid, the two alæ majores, the pre-sphenoid, the two alæ minores, the two pterygoid bones, and the two cornua sphenoidalia.

"To the human anatomists," observes Professor Owen, "the question, What is a bone? may appear a very simple, if not a needless one. He will most probably reply, that a bone is any single piece of osseous matter entering into the composition of the adult skeleton; and agreeably with this definition, he will enumerate about 260 bones in the human skeleton. . . . The arbitrary character of the above-cited definition of a bone, and the essentially complex nature of many of the single bones, and independency of the processes of bones in anthropotomy, are taught by anatomy, properly so called, which reveals the true natural groups of bones, and the modifications of those which peculiarly characterise the human subject." (a)

It is in relation to the anatomy of the cranial bones that the skull of the anencephalous fœtus is particularly interesting. The terms "monsters," "monstrosities," etc., of such frequent occurrence in obstetrical works, should be banished from use; and this highly instructive though imperfect uterine production should be studied in its bearings upon the exact period of its existence, when the circumstances occurred which occasioned the retardation or the complete arrest of its developement. We have no more reason to believe that the anencephalous fœtus is primarily less perfectly formed than the subjects of club-foot and other similar malformation. The base of the skull supports the cell-structure, constituting the early fœtal encephalon; a membrane, corresponding with the dura mater, completes the neural arch. As the brain-vesicles, however, enlarge, it so happens that, from some cause—at present not decided whether it be a fault of primitive formation, intra-uterine mechanical violence, or both combined—they burst, discharge the fluid of the ventricles, together with the supra-ventricular nerve matter, and then the ruptured membranes cicatrise over the medulla oblongata, as a puckered loose bag.

From the moment of the accident, and it may occur at any period of intra-uterine life, the morphological developement of the cranial bones ceases. The different nodules and plates may, it is true, acquire some considerable increase in bulk; but they generally retain their individuality, and, in very great measure, the form which they possessed when

(a) Owen's Lectures on Comparative Anatomy, p. 36.

the brain vesicles were ruptured, and the encephalon ceased to exist. It follows, therefore, that, in the anencephalous fœtus, Nature has presented for our attentive study a series of specimens of human crania, illustrating the points of ossification at different periods of utero-gestation. We also possess the means, after accurate observations, of determining the period at which the rupture of the brain vesicles took place, by noticing the approach of the cranial pieces to the common known forms. I have before me the ossa sphenoidalia from two anencephalous skulls. In one, the basi-sphenoid is as distinct from the pre-sphenoid as it is from the basi-occipital. In the second the os sphenoidale very closely resembles the same piece in the adult skull. It is clear, that the process of ossification and of developement has gone on uninterruptedly longer in the latter than in the former specimen. We have reason to believe that the rupture of the brain vesicles, which led to the arrest of development, occurred far more early in the first specimen; and that, in the second, the rupture must have taken place after or at the time of the coalescence of the pre and basi-sphenoid, probably between the sixth and the seventh month of utero-gestation.

The occipital bone, in the anencephalous fœtus, usually consists of three pieces, of which the centrum or basi-occipital is well formed, and the neurapophyses or ex-occipitals perfect, except that at their superior extremity they are rounded off, instead of presenting a margin fit for coalescence with the spine or the supra-occipital, here usually entirely wanting.

The basi-occipital of an anencephalous fœtal skull, sent to me for examination by Mr. J. Reid, of Canterbury, presented the rounded thin edge of bone bounding the foramen magnum; the depressions for the recti-capitis-antici muscles; the tubercle for the attachment of the superior and the middle constrictors of the pharynx. The cranial surface was hollowed for the reception of the medulla oblongata. In the ex-occipital there was seen, well marked, the occipital condyle; the anterior condyloid foramen for the transmission of the hypoglossal nerve; the processus jugularis, or the transverse process for the attachment of the rectus capitis lateralis muscle, and a flat, thick, quadrilateral plate of bone bounding laterally the foramen magnum. But the foramina and the grooves for blood-vessels were all small, or entirely absent; there was no true posterior condyloid foramen, nor any groove for the inferior petrosal sinus. The foramen jugular was irregular and small. The supra-occipital was wanting, and with it all those important sinuses connected with the cerebral circulation, and meeting at the Torcular Herophili. The constant deficiency of the supra-occipital bone in these subjects, in whatever stage of advancement the other portions of the occipital vertebra may be, induces me to doubt the statement made by Meckel, that ossification of the os occipitis commences in the flat parts of the bone behind the foramen magnum by two triangular points of ossification, which soon fuse together, and are succeeded by two other ossifying points above them; and later still, two others at the side, and two more at the apex of the os occipitis. These "eight points of ossification" are too numerous; the explanation through their non-coalescence of the ossa Wormiana is unscientific and mechanical. As far as my own observations go, the bodies or the centra of the vertebræ are those parts which, about the second month, assume a definite character; the basi-occipital is no exception to this rule, it is the first to exist as a distinct part of the occipital vertebra, and is rapidly succeeded by the two ex-occipitals, which enclose in great part the foramen magnum. Although it is interesting to know where and how bony matter in these cases is first deposited, still it must not be forgotten, that the skeleton preserves its typical significations and importance, whether the phosphate of lime be present or absent. The basi-occipital is developed from a single central nucleus.

Each ex-occipital receives its bony matter by a nucleus which commences about the situation of the condyle and the anterior condyloid foramen: corresponding with the site of ossification of the neurapophyses trunk vertebræ. The supra-occipital, of later formation, and developed, not from cartilage as the preceding, but from membrane, commences, I believe, from one central radiating spot corresponding with the occipital protuberance.

I will not here enter into the subject of the developement of the scapula and coracoid process constituting the hæmal arch; the organs of circulation in the anencephalous fœtus are perfect; hence there is no deviation from the natural structure in the bones with which they are associated.

Meckel's assertion, that "the sphenoid bone is developed by sixteen, and the basilar bone by twenty-seven points of ossification is not supported by any examination, microscopic or otherwise. Were it granted (which, however, would in itself be an inaccuracy,) that exogenic processes of earthy matter possessed an importance equal to that of autogenic processes, and were worthy of enumeration, I doubt if we could succeed in making up forty-three points of ossification to the os spheno-occipitale. Valentin acknowledges that less is known of the developement of the sphenoid bone than of any other part of the cranium.—(Valentin's *Entwickelungsgeschichte*, s. 228.)

Although the ossification of the alæ majores is first most catching to the eye, whether, at the third month, according to Meckel, or the fourth month, according to Burdach; yet the assertion of Nicholai is essentially correct, that at the third month two single pieces (basi-sphenoid and pre-sphenoid, Owen) are developed, which speedily coalesce at the base of the cranium. In many an anencephalic skull, where the rupture of the brain-vesicles has occurred early, these two centra remain permanently distinct; but, in other instances, the coalescence is as complete as in the well-formed cranium. The alæ majores (neurapophyses) are single pieces; and I believe that those who have attributed to them many ossifying points, have not recognised exogenic processes of bone. They unite with the basi-sphenoid before the union of the orbito with the pre-sphenoid; but retain their individuality longer than the two centra or the basi and pre-sphenoid. In an anencephalic skull I have an os sphenoidale perfect in every respect, save that the alæ minores are unattached. Inasmuch as these parts become well formed at about the sixth month, and fusion with the centrum commences at the same period, we may conclude that this was the time at which, in the specimen here referred to, the rupture of the brain-vesicles occurred. The ossifying process commences by a single point around the foramen opticum.

The pterygoid bones, (*i. e.*, the internal plates of the pterygoid processes,) which are diverging appendages of the palate-bones, commence by a single centre of ossification, and exhibit, even at a late period, the clearly-marked line of union with the basi-sphenoid,—a coalescence by which the immobility of the upper jaw is maintained after the adaptation of the palate-bones to the pterygoid plates.

The double neural spines, which we recognise in human anatomy as the parietal and frontal bones, are developed by single ossific centres from each half, or, as would be commonly said, from each bone. Senff is probably more correct than Nicholai, when he assigns the twelfth week, rather than the ninth, for the first appearance of bone in this situation. In the anencephalic fœtus, both bones are the less perfect the earlier the rupture of the brain vesicles, and the more deformed the basis cranii; but I have never met with an instance in which they were better formed than the bones at the base, and they always have appeared less advanced in development. In one specimen, where not only were the bones at the base deformed, but many had lost all trace of their normal character, the parietal bones were represented by two thin scales of bone, about half an inch in length, and two or three lines in breadth; the frontal bones consisted only of the supra-orbital ridges.

The ossa nasi, of later ossification than the frontal bones, are formed by two lateral points, as the preceding; inasmuch as they are not included in the cranial vault, they are not subject to the same varieties in shape. The vomer, the perpendicular lamella of the ethmoid, with the olfactory-sense capsules, are usually well developed; but, in the anencephalous fœtus, longer than in the well-formed skull, the two laminæ of which the perpendicular lamella is composed, remain distinct, and the ethmoid bone, as in many of the carnivora, falls, when detached, into two distinct halves. Each half has two centres of ossification: one for each perpendicular lamella; a second for each mass of ethmoidal cells, which, however, in some specimens, remain cartilaginous so long, that they disappear upon maceration. The deeply-grooved vomer forms the centrum to this segment of the cranium. All authors agree in the late ossification of the ethmoid: Kerkring places it in the fifth month; Nesbitt, between the fourth and fifth; Senff, in the fourteenth week.

I do not, however, agree with Valentin, that the perpendicular lamellæ remains cartilaginous during the whole of uterine life. On the contrary, it becomes bony before birth, but the two laminæ of which it is composed (neurapophyses —Owen) often remain distinct.

That compound piece, first unravelled by Professor Owen, composed of five distinct bones, and termed, in human anatomy, the os temporis, is developed from five ossific centres. It is not sufficient to distinguish, with Valentin, 1. that part connected with the auditory apparatus, and, 2. the rest of the bone, but the latter portion must be yet further analysed. Two portions are not ossified till after birth, namely,—the mastoid and the styloid bones. The other three portions,—namely, the petrosal, the squamous, and the tympanic bones,—receive their first deposits of phosphate of lime about the end of the fourth month. The tympanic and the squamous bones coalesce in some skulls after the seventh month before birth; in others they remain distinct. The ossification of the auditory sense-capsule or the petrosal bone proceeds undisturbed by causes affecting the true cranial segments; and even in the worst-formed anencephalic skull, I have found the semicircular canals and cavities destined to receive the ultimate fibres of the acoustic nerve. There are many other instances in the history of the formation of the nervous system of early peripheral development. In an anencephalic skull I observed a curious deviation from the normal form. The left tympanic bone preserved many of its costal characters, and presented a diverging process, bearing a strong resemblance to the diverging appendage of the dorsal ribs of birds.

This process seemed to illustrate the law, that when, by some accident, the developing force is checked in its proper channel, it deviates and expends itself, not in the production of endless variety, but in the realisation of some known form peculiar to that element of the vertebrate segment. Thus information is to be acquired by the contemplation and study of "monstrosities."

There can be scarcely a more striking contrast than that between the anencephalic and the hydrocephalic skull. The moment the brain vesicles burst, ossification, in its morphological bearings, ceases; but the complete brain vesicles, however greatly distended, become covered by bony plates. The size which the parietal bones may attain in a cranium so diseased, may be seen by reference to any anatomical museum.

In the museum of St. Bartholomew's Hospital I have separated, arranged, and marked the bones in two anencephalic skulls. In one, the pieces are tolerably distinct: but in the other, the arrest of development, occurring at a very early period, has led to the fusion of the bones into several irregular masses, of which the analysis has not always been easy. It appears to me that this subject may be prosecuted with advantage. I am not aware of any previous successful attempt to name the cranial bones so arrested in development, the difficulty arising from the fact of their obvious deviation from commonly recognised forms.

The hæmal arches, or the bones of the face, and the hyoid bone are usually well formed, perhaps somewhat larger than natural, in the anencephalous cranium. The line of union of the pre-maxillary bone with the superior maxillary commonly remains quite well marked, although I have not yet examined a specimen in which the arrest of development was sufficient to constitute the well-known deformity called hare-lip.

SOME GENERAL OBSERVATIONS ON FATTY DEGENERATION.

By WILLIAM FREDERICK BARLOW, M.R.C.S.
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[Read partly before the Medical Society of London, March 20, 1852.]

The subject of degeneration is equal in a pathological, to that of nutrition in a physiological, point of view. If the latter shows us how we live, the former tells us why we die. But these phrases must be taken with due reserve, for our knowledge of the histories of life and death, at once so vast and complex, must, even could we pursue them with Bichât's genius, be for ever limited.

A short time ago, the topic which I shall venture to introduce this evening might have been comprised in a page, but now a large volume would fail to compass it; and I shall be only able to touch upon a few of its leading and most obvious points, as, greatly embarrassed by want of time, I coast too swiftly along its border.

One extremely common, and oftentimes fatal, form of degeneration is seen in the conversion of various tissues of the body into fat, which, although so liable to take their places, is quite incompetent to perform their parts. This change, deteriorating always, and leading frequently to gradual or sudden death, must be viewed in its widest and fullest relations, if we would know its applications and comprehend it aright. It must be judged of as a countenance, not by one feature separately taken, but by all its features, and their blended expression. It must be studied, not as to one organ simply, but the whole body; not as to local circumstances only, but general states; not as to old age merely, but all periods of being, even that previous to birth, the time of our "first life," as Mr. Hunter called it; not as to itself alone, but its frequent, and oftentimes most perilous complication of various affections. It must be pursued microscopically as a matter of course; but he who rests satisfied with the well-marked pictures of a few spoilt fibres or damaged vessels, has not a glimpse even of the field it occupies and its immeasurable relations to decay and death.

It may at once be stated, that the subject of atrophy cannot be separated from that of fatty degeneration; the causes of the one are those of the other, and both blending inextricably, form very often descending steps of one downward course; the first does not lead of necessity to the second, but the second frequently implies the first. nay, I think *always*, for although simple defect of nourishment and true degeneration, fatty or otherwise, are clearly to be distinguished from each other, it seems impossible to conceive how any part can ever be transformed into a lower material without first suffering an impairment of nutrition. But let it be noted, that the word *atrophy*, viewed in a strict and proper sense, and, indeed, according to its plainest meaning, does not simply imply an obvious wasting of the affected tissue, but also a deficiency of perfect nourishment, whatever be its kind, and must often be used, both as a matter of truth and convenience, in reference to those first failures of assimilation, which, if they neither stop nor be remedied, must lead sooner or later to manifest changes or losses of structure. Again, it is quite manifest that real atrophy and seeming hypertrophy of a part may co-exist; there is degeneration of tissue, but increase of size, bulk therefore often, without any corresponding power; and this we see excellently exemplified by hearts, which are at once fatty and enlarged; and it is also well instanced by what Mr. Hancock pointed out to the Society the other evening, in reference to that which used to be denominated hypertrophy of the bladder's contractile coat, this increase of size being really demonstrative of no augmentation of the muscular fibres, but often signifying the very contrary; for they have been seen by him in cases of such increase, and not faintly or a few times merely, more or less in a condition of fatty degeneration.

The right preface, then, to the rational study of fatty degeneration, is the consideration of imperfect nutrition; it then comes in legitimate order,—the order of nature, and is much simplified in consequence. In Mr. Paget's observations on atrophy, we find it treated of as a part of the subject; he speaks of it as a manifestation of atrophy, and so it is; there is no evidence of anything, if there be none of this.

It would be absurd to attempt, in such a fragment as I am offering now, an elaborate statement of all the causes (of *all*, indeed, under any circumstances) which may lead to fatty degeneration; but I will suggest for consideration some of the principal:—1st. A wrong or defective state and composition of the blood; 2nd. An insufficient supply of blood; 3rd. A deranged or obstructed influence of the nervous system; 4th. An imperfect, unhealthy, or declining state of the part to be nourished. (a) These conditions, be it observed, are in every respect the reverse of those which Mr. Paget has specified as most important, in order to the completion of perfect nutrition.

I. *A wrong or defective state and composition of the blood may be a cause of fatty degeneration.* The blood is the acknowledged life of all parts; its poverty, its dis-

(a) Lectures on Nutrition, Hypertrophy, and Atrophy, p. 8.

cases, its death are theirs. The great Harvey speaks of the blood being "the cause of youth and old age," and he who fairly studies this expression, shall, though he hold it too unqualified, at length perceive in it the largest meaning. When Simon informs us, that the blood of the fœtus contains more corpuscles than that of its mother; that the period of maturity is richer in these corpuscles than an earlier time; that they continue plentiful during middle age, but from thence are subject to decrease, does he not, in part, make a practical commentary on this indefinite, but suggestive phrase? (a) That the blood can give rise to fatty degeneration, in which shape age oftentimes comes prematurely, by diminishing the proper nutrition of the tissues, will appear from a multitude of familiar considerations.

Old age supplies us with by far the most abundant and general instances of this form of degeneration, a fact, which taken by itself alone, would almost prove to any one's satisfaction its dependence on a condition of atrophy or decline. Middle age may present the arcus senilis, (the discovery of the true nature whereof, by Mr. Canton, was a step in the inquiry of the first importance,) and youth even, nor do we yet know the earliest age at which it may appear; but, it is, generally speaking, seen at a later, feebler period, and constitutes one of its most characteristic signs. But to the fatty degeneration of extreme old age, which, doubtless, depends partly on the decreasing virtues of the blood itself, we can hardly affix the term abnormal or morbid; as well might we apply both or either of these epithets to the fading and falling of the leaves in autumn, which surely are not more out of the regular course of nature than were their budding and unfolding in the season of spring. Does the arcus senilis occur at this time, no one surely could speak of it as a mark of disease in the sense that he would of a variolous pustule. In the well-known representation of the seven ages the last is surely as natural as the first. But, physically and mentally speaking, the time of old age, or rather the state proper to it, is very capricious; and how can we wonder at this circumstance, seeing with what different constitutions men are born,—what varying hereditary influences affect them,—what unlike fortunes as to rest or labour, abundance or destitution, successes or failures, to say nothing of the effects of disease and accident, tend either to spin out or contract their career.

I believe that the symptoms of the "climacteric disease," as Sir Henry Halford has described it, (b) to be, not always, but in many cases, the evidences of that form of degenerations which occupies us. It is true, that he inclines to call it "a disease rather than a mere declension of strength, and decay of natural powers," but I dare to suggest, that the contrary view will be found more correct, and, above all, by those who most attentively consider his interesting history. Its occurrence between fifty and sixty-five years of age, a period embracing the grand climacteric, which Sir Thomas Browne discusses with all his wonted ingenuity and quaintness,(c) agrees well with the time wherein fatty degeneration invades very commonly to a serious degree. Sir Henry Halford speaks of its being complicated with other complaints; and this is exactly such a phrase as would be used by anybody about to describe the effects of fatty degeneration without clearly tracing them to their common source. He thinks it not very improbable, that it is connected with a brain wanting in energy, and a heart "irregularly supplied with nervous influence;" and these are signs of failure which, far from being incompatible with the state I would refer them to, are very often to be remarked as its attendants. "Physicians," he observes, "will not expect a cure for this malady;" neither will they for that severe and general degeneration which may occur at a time when no diet can restore the richness of the blood, no stimulants affect the vital organs as once they did, and no fortune, however prosperous or unexpected, arouse the mind from that increasing lethargy which it can no more successfully attempt to shake off than it can cure those physical changes of the brain whereupon the decline of its faculties depends.

In Dr. Marshall Hall's work on Diseases of Females will be found a chapter on "the Decline of the Vital Powers in Old Age." After reading his observations on the climacteric affection, I feel the more confirmed in these remarks. He speaks of a thinness and a paleness of the countenance, and a peculiar imbecility of its muscles; of debility of the articulation and the general movements; of headache and vertigo; of fluttering of the heart and irregularity of the pulse; of hurrying of the breathing by exertion or emotion; of quick fatigue; of wakefulness and restlessness; of a pale livid hue, and coldness of the fingers; of wasting of the muscular flesh; of the husky voice and clogged bronchia; of the distension of the bowels with flatus; of the patient being "obviously plunged into a state of dissolution by the too active operation of medicine." Let these symptoms be compared with those of the fatty heart, as stated by Dr. Quain;(a) and let those failures of function which degeneration produces be considered, together with the temporary disturbances which chlorosis and other affections of the blood produce; but, of course, there is all the difference between one organ failing from decay, and another, its structure remaining sound, flagging temporarily from insufficient stimulus.

But disease anticipates the ravages o time, and there is no more interesting part of our subject than that which refers to its wide relation to those various affections which impair nutrition. In Dr. Ormerod's observations on the fatty heart, we find accounts of its occurring in connexion with marasmus, epistaxis, phthisis, and fever, all which affections impoverish the blood.(b) That phthisis should lead to it can give no surprise; it runs often a slow and tedious course, while an emaciation, which shows the skeleton in outline, is but too common. The observations of Louis on the softening of the tissues in cases of this affection must be well considered in reference to fatty degeneration. What he says of the fatty liver, the softened brain,(c) the atheromatous aorta, and the condition of the heart, is of great interest; but the observations should be repeated with all the help which the microscope can furnish.

It must not be thought that this question of the complication of phthisis, by degeneration, has no practical interest. The fatty heart, when once produced, is a grave addition to a complaint not needing it; and may lead even to sudden death. Not long ago I examined a man far advanced in consumption, who, having a severely degenerated heart, turned suddenly pale and fell dead upon the floor; there was no act of dying, he was instantly dead. M. Louis, in his great work on phthisis, has a chapter on "cases of unexpected death, which are not explicable by the condition of the organs," and describes the case of a woman who "died suddenly, to the great surprise of the occupants of the neighbouring beds." "The heart was somewhat soft;" and there is no great boldness in conjecturing that it had undergone fatty conversion. M. Louis remarks, "No doubt, in this case, the amount of disease in the lungs was considerable; but a fair portion of those organs was still permeable to the air, and respiration performed with regularity a few minutes before death. Between that time and the moment at which life suddenly ceased, no change, at least of an appreciable kind, appears to have been effected in those organs. How, then, can we explain the unexpected death? Is it justifiable to compare the viscera with the locomotive muscles, and admit that, under certain circumstances, they become suddenly incapable of performing their functions from a kind of fatigue?"(d)

M. Bizot alludes to the fatty heart as an associate of phthisis, but the cases he refers to were not examined by the microscope; it can hardly be doubted, however, that there was extreme atrophy of the organ, if not absolute degeneration. Dr. Ormerod relates four cases of phthisis in which this change had indubitably happened; in one of these, however, the patient, as should be noted, had discharges of blood from the bowels during the last three months of his life.

It would be very important to examine carefully the

(a) Simon's Animal Chemistry, edition of the Sydenham Society, Vol. I., p. 237.

(b) Essays and Orations, page 1.

(c) Of the Great Climacterical Year, that is, sixty-three.—*Vulgar Errours, Chapter XII.*

(a) Medico-Chirurgical Transactions, Vol. XXXIII.

(b) On one form of fatty degeneration of the heart.—*Medical Gazette*, 1840.

(c) It would be very interesting to examine the small cerebral vessels in those cases of ramollissement which complicate phthisis; it can hardly be doubted that fatty degeneration would be found sometimes. Apoplexy is a rare complication of that affection, probably because of the circulation being so subdued and feeble. But M. Rochoux, in his well-known work, records a remarkable instance, entitled, "Ramollissement du cerveau avec melange d'epanchement de sang; phthisie pulmonaire." The case is rendered the more instructive from the patient being only 29 years of age. —"Recherches sur l'Apoplexie," p. 294.

(d) Dr. Walshe's Translation of Louis on Phthisis,—edition of the Sydenham Society, p. 397.

softened brains which occasionally occur in phthisical patients, with the view of detecting fatty degeneration of the small blood-vessels. The other day I visited a man, aged 40, who was dying of consumption; he had an arcus senilis and slight hemiplegia. His body was not permitted to be examined, and it remains uncertain whether his paralysis were due to the presence of tubercle, or fatty degeneration, or some other cause.

M. Louis, Dr. Latham,(a) and Dr. Stokes have observed upon the relation of the softened heart to continued fever. In some cases of its existence, an irregular, feeble pulse, and an almost inaudible systolic sound of the heart, have been noticed during lifetime. This matter is of great clinical interest. But how are we to tell whether this change of structure of the heart, supposing it to be detected after death, have preceded the fever, or occurred during its course? Much, perchance, may be learned from the history of the patient, who, ere he was fever-struck, may have long had symptoms of a fatty heart; much may be gathered from the period of the complaint whereat death surprised; much also from the age of the patient, and the absence or presence of the arcus senilis. Dr. Latham told me, that he had seen some sink at the beginning of fever, and in a manner not to be explained, unless by the degenerated condition of the heart. Dr. Ormerod mentions the case of a woman who died of fever, fatal by exhaustion; a fatty heart was detected after death; but as the patient was, previous to her illness, thin and haggard, and not less than 64 years of age, and lay no protracted time ill of her fever, it is fair to presume, that her cardiac malady had existed independently of the fatal affection, which it doubtless aggravated, and perhaps made mortal.

But all chronic or wasting diseases, whether external or internal, may lead to fatty degeneration. Among the cases referred to by Dr. Quain, is one of a child who, having been long ill, at last died of cancrum oris; another, of a young woman, who was the subject of chronic phthisis and gastric irritation; and a third was an instance of hæmaturia. Fatty degeneration, though sometimes noted especially in the heart, in which organ the change has been oftenest observed, is doubtless more general than many suppose. "We never hear," says Mr. Gulliver, "of fatty degeneration of the testicles, of the kidney, and other glands, of the lungs, of the blood, etc.; yet these affections are rather common in a variety of chronic diseases, especially of old people, and often in connexion with great general emaciation. In wasting of the testicle, and when the functions of that gland are impaired by lingering diseases or old age, the seminal tubes are more or less obstructed by fatty matter, which occurs in free globules, and in more equal-sized and minuter molecules, generally aggregated into comparatively large, rounded, or irregular masses, nearly opaque, and of a brown or dull yellowish colour."(b)

The microscopical researches of Mr. Bowman have lent new interest to the "fatty liver," by showing the real nature of the change. This organ degenerates from general atrophy, and so does the kidney. Renal degeneration, as Dr. Peacock(c) shows, not rarely co-exists with phthisis; nor can it be doubted that it is frequently occasioned by the latter affection, which, however, has no specific influence in causing it; whatever produces general atrophy may give rise also to failure of nutrition in the kidney, and consequent fatty degeneration. In old persons who have died apoplectic, I have noticed the granular kidney in combination with fatty degeneration of the large and small cerebral blood-vessels; forms both, of local atrophy produced by the general decline of age.(d)

(a) "I have been looking over M. Louis's admirable book upon fever, and find him laying great stress upon the intermitting and irregular pulse, attesting its formidable import, declaring how few who have it recover, and stating, that he has found in almost all of those who have had it, and have died, a softening of the heart's muscular structure."—Lectures on Diseases of the Heart. Vol. II., p. 163.

(b) In some testicles which Mr. Pardey (when house-surgeon to the Westminster Hospital) examined and showed to me, this kind of obstruction of the seminal tubes was extremely well-marked. See Gulliver on "Fatty Degeneration of the Arteries, with a Note on some other Fatty Degenerations." "Medico-Chirurgical Transactions," Vol. XXVI.

(c) *Lancet*, Vol. I., 1842.

(d) *Monthly Journal of Medical Science*, August, 1845. Dr. Handfield Jones made some interesting observations at a late meeting of the Society, (March 8, 1852,) in support of Dr. Prout's view of degeneration of the kidney, being, very frequently, quite independent of inflammation. Were I going into the general question of renal degeneration, I should, of course, refer particularly to the contributions of Dr. Johnson and Mr. Simon.

Much of early decay may be traced, doubtless, to the impairment of nutrition by slow disease; the malady vanishes, its effects never. Slow convalescence is a state which should be watched; the relapse of a malady is a frequent consequence of patients resuming their occupations too quickly; and the second attack is longer and severer often than the first. We must look more to the remote consequences of illness, and try to prevent them more. The young as to age become old as to structure, and often from affections which impair the blood. In the plant, which seems to grow as we view it, we have evidence of a sap loaded with nutriment, abundant to overflow, and freely circulating; but what inference draw we when the leaves turn yellow and fade away?

Close confinement has a wide relation to the question of atrophy. So have the ills of poverty, which untimely enrich pathological history. Bad food, foul air, and (far greater evil than it would seem at first) insufficient *light* even, lend death new powers. Quick starvation, as depicted by Dante, has made many shiver with horror; but *slow* starvation, silently working, but most constantly, effectually, and on an enormous scale, excites not nearly the sympathy that it should. It is this slow starvation which leads, not only to atrophy, but often to destruction of tissue; nor can we get frequently at its true history without a complex tracing of past miseries and deprivations. "Under whatever circumstances the fatty transformation occurs, it is obviously a process of degeneration, or degradation to a low scale of animal or even vegetable life." (a)

II. *An inadequate supply of appropriate blood* must be regarded as one of the principal causes of fatty degeneration. It may be either general or local. The questions of morbid change and simple deficiency of blood are, to a great extent, inseparable. Many of the cases already brought forward as illustrative of the one, imply also the other. Pure anæmia, speaking generally, can very rarely exist alone, for even that of hæmorrhage and blood-letting soon passes into spanæmia. (b) "Continuous and excessive loss of blood must necessarily produce a change in the composition of that portion which remains in the system." (c) F. Simon analysed the blood in a case of a melæna:—"It did not coagulate upon standing, and contained no fibrin. No blood corpuscles could be observed under the microscope, but merely some yellow particles floating in a clear fluid. It was very rich in fat and hæmaphæin." But its state here might have been due partly to the disease on which the loss of blood depended. As with a part, so with the body; it often doubly suffers from bad and scanty blood; and yet paleness, languor, palpitation, breathlessness, and frequent tendency to fainting, have, at times, not saved it from injurious depletion. F. Simon speaks of the difficulty of procuring blood from the spanæmic for analysis, on the ground of their being hurt by its withdrawal; but certain it is, that there are still practitioners who let not anæmia stand in the way of bloodletting.

Mr. Simon remarks, that, "in fifteen cases of idiopathic anæmia, Andral found the proportion of blood-corpuscles varying, by successive degrees, from what he considers their normal standard (127), to so low a level as 30 in a thousand; and he found (precisely as would have occurred after large hæmorrhages) that the water of the blood had increased just as the corpuscles had decreased, standing in one case as high as 886. In other particulars he considered the blood healthy; but his estimate of fibrin for healthy blood is so liberal, that probably most computators would have differed from him in respect of these cases, and would have described them as presenting an excess of that material; and the organic residue of the serum is in most cases high. It is, however, quite evident, from examination of the various analyses which have been made, that the increase of fibrin (though often observed) is not essential to constitute chlorosis; that the disease substantially consists in an atrophic condition of the blood, evinced in the non-development of its characteristic cells; and that the larger proportion of albumen generally found in connexion with this state may fairly be explained, where it exists, as an accidental result of the defective cell-growth, which has left

(a) Principles of Medicine, by Dr. Williams, p. 374. Researches have borne ample testimony to the truth of the observations on "Transformation and Degeneration of Textures" contained in this work.

(b) "From αἷμα, blood, and σπανός or σπάνιος, poor; poverty of the blood." Simon's Animal Chemistry, Vol. I., p. 306.

(c) Simon, Op. cit., p. 317.

the serum more saturated with organic blastematous material than it could have retained if the normal proportion of blood-cells had been developed out of it.

"Few of the effects of medicine are more immediate, or more remarkable, than that which results, in this disease, from the exhibition of iron. We all know, clinically, how soon, under the influence of this remedy, our patients recover their natural complexion; and a chemical analysis of the blood explains this sufficiently. F. Simon gives a case where, after a few weeks of treatment, the proportion of blood-corpuscles rose from 32 to 95 in the thousand; Herberger, one where it rose from 38 to 98; Andral and Gavarret, one where it rose (in spite of two bleedings) from 46 to 95. (a)

In all circumstances where death happens subsequently to repeated hæmorrhages or anæmia, the heart should be most minutely examined. Four examples of fatal chlorosis have been spoken of by Dr. Marshall Hall.(b) How important to have known the state of the heart-fibres!

I have already mentioned, in a former contribution, the case of a boy *six* years of age only, who lay long pale and languid before dying, and in whom, after death, the most marked degeneration of the heart was found. Dr. Ormerod has detailed the history of a pale, bloodless boy, aged *eight*, who had suffered from profuse epistaxis; he appeared to sink from exhaustion, and died in convulsions; the heart was found mottled by buff-coloured spots, composed of disorganised fibrils, which, in place of their proper striæ, presented "irregular rows of little granules of oily matter." A case was mentioned to me the other day, in which the arcus senilis was seen in a man aged forty, who had suffered from frequent nasal hæmorrhage, and had been bled largely likewise at different times. Without pretending to say positively that the arcus appeared as a direct consequence of the loss sustained in this particular instance, we may suppose with reason that the degeneration of the cornea may be much promoted by repeated hæmorrhage. The conversion of this part must be caused by atrophy, before the latter can be indicated by it. The frequent and often profuse hæmoptysis which occurs in phthisis must be considered in respect of the relations of this disease to fatty degeneration of the heart and other parts. Nor must the treatment of disease be passed over in reference to the production of atrophy and degeneration. Laennec relates, that the heart of a woman, fifty years of age, was found after death no larger than that of a child of twelve, and looked like a withered apple. She had been treated for hypertrophy on "the plan of Valsalva." I do not say the degeneration was fatty here; but the circumstance of hypertrophied hearts being likely to become converted into fat, reads, or should read, a lesson. So long as they are simply enlarged, life, though embarrassed, may be continued long; but if degeneration be added, the danger of sudden death may become extreme, and the peril is heightened, and that measurelessly, if bloodletting be largely and incautiously adopted.

The connexion of *sanguineous* apoplexy with *anæmia* remains to be traced. It is not to be doubted that the latter, when long-continued, may lead to fatty degeneration of the cerebral blood-vessels, just as it does to that of the heart-fibres. I have seen apoplexy happen in young subjects who looked deadly pale. Not long ago I examined a chlorotic young woman, aged 26, who died with extreme suddenness. There was an immense coagulum of blood in the middle lobe of the right side of the brain, and the part surrounding it was extremely soft. The case happened before I had read Mr. Paget's contribution, and the small blood-vessels of the organ were not examined. Dr. George Burrows has frequently observed apoplexy in pale, attenuated persons, having "the very reverse of the apoplectic make."(c) Dr. George Budd has narrated some cases of apoplexy consequent on syphilis.(d) The contribution is of great interest, as supporting the doctrine that all chronic and debilitating maladies *may* so impair the nutrition of the cerebral blood-vessels as to lead to their degeneration and rupture.

It may be well believed, that the study of the whole question of degeneration will have the best influence on the treatment of disease. Certainly we have too much closed our eyes on those organic conditions, which extremely loosen the tenure of life and too much modify the result of maladies, without our aiding them by that adventurous treatment which adds largely to the perils already existing.

[To be continued.]

(a) Lectures on General Pathology, by John Simon, F.R.S., p. 42. Dr. Marshall Hall, speaking of chlorosis, observes, "I have observed the blood which has flowed from the nose scarcely to tinge the sheets."
(b) Lectures on Medicine, *Lancet*, March 31, 1838.
(c) On Disorders of the Cerebral Circulation, p. 143.
(d) *Medical Gazette*, May 27, 1842.

SCIENTIFIC LECTURES.

TUESDAY, THURSDAY, AND SATURDAY, MAY 18, 20, AND 22.—ROYAL COLLEGE OF SURGEONS. *Subject*:—Professor PAGET, "On Malignant Tumours."

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening,	May 15.	ROYAL INSTITUTION. *Subject*:—Prof. FARADAY, "On Points Connected with the Non-Metallic Elements." Three o'Clock.
——	——	MEDICAL SOCIETY OF LONDON. *Subject*:—Dr. W. V. PETTIGREW, "On Burns and their Treatment." Eight o'Clock.
Monday,	May 17.	ROYAL INSTITUTION. *Subject*:—J. CONOLLY, M.D., "On Insanity." Four o'Clock.
——	——	CHEMICAL SOCIETY. Eight o'Clock.
——	——	STATISTICAL SOCIETY. Eight o'Clock.
Tuesday,	May 18.	ROYAL INSTITUTION. *Subject*: — E. LANKESTER, M.D., "On the Physiology of Plants." Three o'Clock.
——	——	PATHOLOGICAL SOCIETY OF LONDON. *Meeting of Council.* Seven o'Clock.
Wednesday,	May 19.	ROYAL INSTITUTION. *Subject*:—J. CONOLLY, M.D., "On Insanity." Four o'Clock.
——	——	GEOLOGICAL SOCIETY. *Subjects*: — 1. J. TRIMMER, Esq., F.G.S., "On the Soils Covering the Chalk of Kent." 2. Sir C. LYELL, "On the Tertiaries of Belgium and their British Equivalents. Part II. The Lower Tertiaries." Half-past Eight o'Clock.
Thursday,	May 20.	ROYAL INSTITUTION. *Subject*: — R. WESTMACOTT, Esq., R.A., "On the History and Practice of Sculpture." Three o'Clock.
——	——	HARVEIAN SOCIETY. Eight o'Clock.
Friday,	May 21.	ROYAL INSTITUTION. *Subject*:—B. C. BRODIE, Esq., "On the Allotropic Changes of Certain Elements." Half-past Eight o'Clock.
Saturday,	May 22.	ROYAL INSTITUTION. *Subject*:—Prof. FARADAY, "On Points connected with the Non-Metallic Elements." Three o'Clock.
——	——	MEDICAL SOCIETY OF LONDON.—*Subject*:—Dr. SIBSON, F.R.S., "On the Use of the Chest-Measurer in the Diagnosis of Diseases of the Chest." Eight o'Clock.

Medical Times & Gazette.

SATURDAY, MAY 15.

THE LATEST EDINBURGH QUARREL.

VARIOUS pamphlets and letters, printed for "private circulation," and therefore read by everybody, have been travelling for the last two or three weeks among the gossiping circles of the Modern Athens. A very pretty quarrel between certain medical celebrities bids fair to divide Edinburgh into two parties, headed respectively by Professors Simpson and Miller, the two chief belligerents. The homœopaths have "improved the occasion," and Dr. Henderson grimly smiles over the feud he appears to have had no little share in exciting.

We, who are removed in every respect from the combatants, are perhaps in a better position to judge of this unfortunate business than those in the midst of the *mêlée*; and it is with the hope that our unbiased opinion may have some influence in leading matters towards an accommodation that we allude to the subject. Were it not for this consideration, we should hardly meddle with an affair so

offensive and disreputable, or give to it greater publicity than it has already unfortunately attained.

It appears, then, that in the middle of March, Dr. Simpson performed an operation on a lady, the wife of a medical man. We are not told the exact nature of the operation; it was not uterine, but, as we infer, vaginal. Two days subsequently, symptoms came on which were considered by Dr. Christison, who was called in, to indicate low peritonitis. The patient died before midnight on the same day.

So sudden a death, of course, caused no little noise in Edinburgh, where everybody seems much more concerned about other people's business than their own. It became the topic of the day, especially in medical circles; and, in the absence of any certain knowledge, all sorts of rumours were afloat. The most favourite opinion was, that the patient died of hæmorrhage. A certain circumstance gave colour to this. Dr. J. Matthews Duncan,—a quondam assistant to Professor Simpson, but with whom he had had some quarrel,—had employed an upholsterer and undertaker —one "Will Hardie"—to make some articles of furniture; and being in this man's shop, and conversing about the "engrossing topic," he was informed, that the mattress on which the patient lay had been sent, stained with blood, to the shop to be cleaned. Dr. Duncan mentioned this to Professor Miller. This latter gentleman, having subsequently, and according to his own solemn statement, accidentally, and for another purpose, entered the upholsterer's shop, took occasion to ask if the stain of blood was considerable, and was answered in the affirmative. Meeting subsequently with Dr. Henderson, who, in alluding to the great topic, mentioned the current opinion of hæmorrhage being the cause of death, Professor Miller stated the fact he had learnt from the upholsterer, as confirmatory of this opinion. In a short time, an homœopathic physician had circulated the news throughout Edinburgh, that a patient of Dr. Simpson's had been undoubtedly allowed to bleed to death after a trifling operation. On inquiry, this rumour was traced back to Professor Miller, having, as was supposed, originated from his conversation with Dr. Henderson. We may remark here, that this report of the bleeding was evidently altogether incorrect. Drs. Simpson and Christison are men of too great acuteness to have overlooked it had it occurred, to say nothing of the husband, a medical man, who watched his wife most carefully. On examination, also, of this famous mattress, the stain of blood was found to be very trifling, and not more than would naturally be found after any operation on a vascular part. It is much more probable, that the death was owing to one of those sudden sinkings after operation which occur from time to time without obvious cause, or that, as supposed by Dr. Christison, it was caused by low peritonitis.

Such are the facts of the case. The quarrel between Dr. Simpson and Mr. Miller arose from some expressions used by the former gentleman in a letter to Dr. Christison, accusing Mr. Miller of unhandsome and unprofessional conduct in making inquiries about the case, and in circulating the erroneous report. Mr. Miller's defence is, that the presumed fact about the mattress came to his knowledge accidentally, and that, in mentioning it to Dr. Henderson, in the course of a casual conversation, he had no sinister motive, nor wish to say anything injurious to Dr. Simpson.

Divesting the matter of all personalities, the thing lies in a nutshell. No one who knows anything about the gossip of a country town—and Edinburgh, in point of scandal, is equal to any country town—can doubt for a moment how far Mr. Miller has been to blame. In so far as he certainly was very curious about a thing which in no way concerned him, and kept no guard on a certain unruly member, he is to be condemned. His condescending to discuss the case with "Will Hardie," and the countenance he gives to the homœopaths—for he is the only man of mark in Edinburgh who notices or meets them—are much to be regretted. Professor Miller must remember, he cannot "touch pitch without being defiled." That he has done so, may have won for him the distrust of his brethren; but that, in the case before us, he has acted in any underhand manner, is certainly not warranted by the evidence which has been put into circulation. On the other hand, that Dr. Simpson should be annoyed at this false report, and hurt at the discovery, that the indiscretion or curiosity of a colleague had set it afloat, was inevitable.

It is possible, that some of those who read the correspondence may be disposed to take a less charitable view of matters, and may detect at the bottom of the business latent disunion and jealousy exploding in this miserable quarrel. Such a supposition would be so damnatory of the characters of some of the parties, that we cannot entertain it. It is also an unnecessary solution of the circumstances, since the real origin of the dispute is clear as daylight.

This dispute touches a vital doctrine of medical ethics; a doctrine admitted by all, but practised by few. The first law of courtesy and of professional honour is, that one medical man shall not discuss, criticise, much less condemn the conduct of another. How can the Edinburgh Professors expect that their students will practise, in after-life, those virtues of discretion, forbearance, and courtesy, which they see so utterly wanting in their teachers? How can Mr. A learn, that in practice he is to be under a deep moral obligation not to injure directly, or by inference, Mr. B, when he finds medical men in Edinburgh busying themselves about an unfortunate case, and giving currency to reports, the truth of which must be doubtful, though their injurious consequences to another medical man are unequivocal? Gross malpraxis and unavoidable mishaps are not to be put in the same category. The one may be visited with indignation; the other should be received with silence, or lightened by sympathy. The present quarrel between the two Edinburgh Professors has had its counter-part in every town in the kingdom, and in every case has arisen from the same causes, viz., a habit of gossiping, or a love of detraction. That such things can be altogether prevented, is perhaps impossible; yet we think, that the position in which these two eminent men have placed themselves, will go far to deter others from committing the faults which produce results so discreditable and humiliating.

BETHLEM.

At last, the massy portals of Bethlem have yielded. The Commissioners of Lunacy, upon the polite introduction of the Secretary of State, have visited its spacious and airy galleries, investigating and searching into the domestic management of that noble Institution.

For many reasons, we could have wished them a more pleasing visit; and desired that the result of their scrutiny should have led to the expression of approbation and gratification, rather than the merciless censure and graceless reproof which appear to have been visited upon the Medical Staff.

We feel, however, no hesitation in expressing our full conviction, that the publication of the particulars which led to this visit, and the details of the circumstances in which

neglect and incompetence have been observed, would remove no small portion of the blame from the shoulders of those upon whom it has unfortunately fallen, and transfer it to those who deserve it more,—the Sub-Committee of Governors.

Bethlem is only one of the many instances which from time to time have demonstrated the utter incompetence and unfitness of similar Boards of Management efficiently and properly to carry out the original intentions of the founders, and to administer with judgment and discretion the vast resources entrusted to them. In proof of this, how constantly are our law courts appealed to, and the talent of the bar engaged, merely to correct and unravel the confused and erroneous decisions, or the abuse of power by some wealthy trustee or guardian, whose only qualification for the position he holds is, the donation of some small portion of the accumulated gains of his successful speculations.

Were we to call over the list of Governors who take their seats at the various Board meetings at Bethlem, how many would answer solely to this qualification! how many would confess their entire ignorance in all matters pertaining to the insane, their treatment, and all that is requisite to their bodily comfort! And yet such men are the prime rulers in this charity, established solely to meliorate the condition of an unfortunate class of persons, whose management requires the wisest counsel, the most prudent vigilance, the nicest discrimination, and the soundest judgment, to superintend and direct. For this duty who so fitted as the well-educated and enlightened physician? But, if his hands be tied in the performance of his task, his practical usefulness limited, or his privilege of judgment curtailed; is it just, is it honest, to visit him with censure, and accuse him of neglect and inefficiency, caused solely by the bonds imposed upon him by others?

It has long been generally felt, and nowhere so much as in old endowed institutions like Bethlem, how little value or attention is paid by Governors to the opinions, suggestions, or advice of the medical officers, even in matters within their province. Committees and Sub-Committees are too fond of assuming to themselves all power and knowledge, forgetting the true spirit of the foundations whose trusts they are called upon to administer, and ignoring in their self-sufficiency all but their little selves. Of this, Bethlem has long been a glaring illustration; for it has been said, that there a medical officer may as well hope to be heard above the locomotive scream, as to obtain the adoption of any novel scientific principle, however beneficial he may deem it for the patients. Should his suggestion run counter to the opinion of the Committee, or interfere with the pet conception of some popular individual at the Board, such recommendation is passed by unheeded, and all chance of its adoption rendered hopeless.

It is to remedy this state of things, and reform the evils which of necessity result from them, rather than to inculpate the Medical Staff, that the Government has wisely interfered; and most sincerely do we hope, that they will continue to do so until Bethlem has been remodelled, and fitted with every means and appliance which science and experience can suggest to further the special object for which it was founded. Then, and not until then, will this Institution, noble and rich in every way, become what the public have a right to demand it should be—the foremost and the first asylum in the land, dispensing liberally and faithfully the great blessings it has the power to bestow; and a School of Medicine, from whose halls students may go forth, to carry through the length and breadth of the Kingdom a sound knowledge of the pathology and nature of insanity, and extended views of the rational treatment of the insane. And this, under the persuasive power of public opinion, it will become.

The fiat that reform shall take place, has gone forth. Already the old leaven has been quickened; gently stimulated by the Commissioners in Lunacy, it will soon work out. From a pamphlet before us, we find it is decided, that Bethlem shall have a resident Physician.

"The proper care of the patients, and the due administration of the Hospital, in accordance with the Rules, shall be his first consideration; next to which he shall use his best exertions to render the establishment effective as a school for the study of insanity, and the dissemination of knowledge respecting its nature, causes, and proper treatment. To effect which,—

"He shall admit as pupils medical students who comply with the rules prepared for such cases; the Governors reserving to themselves the right of nominating, from the Metropolitan Hospitals, ten pupils, who shall attend gratuitously.

"He shall make such regulations for their instruction, consistent with the comfort of the patients, and the educational proceedings in the other hospitals, as he may see fit.

"The pupils shall have the privilege of attending all *post-mortem* examinations made in the Hospital.

"He shall give, during each term, a course of lectures, to be illustrated by the cases under consideration at the time.

"He shall, at the close of each term, examine the several pupils, and shall recommend to the Committee the most proficient of them for appointment as Clinical Clerk.

"His salary shall be 700*l.* per annum, exclusive of Pupil's Fees, with a residence in the Hospital, furnished with planned and fitted furniture, and an annual allowance of coals, not exceeding twenty tons, with a limited supply of gas."

We regret, however, most deeply, to find that the resident Physician is to be "under the control of the President! the Treasurer!! the Committee!!! and the Bethlem Sub-committee"!!!!

God help the unfortunate wight! We much doubt that any "Fellow or Licentiate of the College of Physicians in London, Edinburgh, or Dublin, or a Doctor of Medicine of the University of Oxford, Cambridge, or Edinburgh, qualified to practise as a Physician," worth such a salary as is offered, will be found to accept the office under the terms proposed. *Mais nous verrons.*

CANCER HOSPITAL.

On Friday last, Dr. Marsden became a petitioner at the Court of Common Council for a grant of a hundred guineas towards his Free Cancer Hospital. It was only the accident of but one alderman being present,—more being required for the proper constitution of the Court,—that prevented his application from being acceded to. After what we said in our last Number relative to the vice of special hospitals, it will be needless to state, that we rejoice at this defeat (temporary though it may be) of an attempt to drain the public purse on behalf of an object which we have shown to be opposed to the progress of medical science, and to the good of the public. Our thanks are due to Dr. Clark for his bold opposition; and, if Dr. Marsden should again have the temerity to demand public support for his scheme. We shall look to the able Common-Councilman to do battle on behalf of the Profession. Dr. Clark's remarks are the very echoes of our own words; indeed, from the highest authorities in the Profession to the lowest, we find we have given utterance to the general sentiment, and have received thanks on all hands for the stand we have determined to make against a nuisance which is becoming intolerable.

By an advertisement in the *Times* of Monday relative to the Free Cancer Hospital, we perceive that an appeal is being made to the public to provide a house, furniture, a matron,

beds, etc., to receive in-patients; and, towards this object, Mrs. Wolrige's fund, we are informed, has been set aside. How can Dr. Marsden have the conscience to squander money so unprofitably, seeing day by day, as he must do, the unoccupied condition of his own hospital—the Royal Free? Here he might find a ward to his hand, which we would engage could be furnished for less than the sum he has already received. We put it, then, to the members of the Common Council, whether he has a right to demand of them a hundred guineas for sheer waste? If the cure of a terrible disease is what he aims at, is there any reason why the empty wing of an old-established Hospital should not be as acceptable to him as a distinct building?

As Dr. Marsden is the chief promoter of the scheme, we presume this advertisement, with reference to the Free Cancer Hospital, received his sanction. Will he, therefore, have the kindness to explain the exact meaning of the following extract from it:—"This institution has now been in existence twelve months, during which period a larger number of patients suffering under this dreadful malady has been brought together, than at any other period, clearly showing the necessity (!) there is for an institution exclusively devoted to the treatment of this *hitherto*-considered incurable disease." Of course the meaning of the term "*hitherto*-considered incurable disease" can only be, that it is now curable. Indeed! We are deeply thankful to hear it. But who has found out the cure for this terrible scourge? Whose art has enabled us to turn aside the fatal shaft which, but too often, the poor patient is bound to witness quivering in his healthful-looking frame? Has Dr. Marsden had the glory of conferring this blessing upon poor suffering humanity? Is he in possession of the secret which will suddenly arrest the erring cell-growth which squanders human life? If so, we have done him grievous wrong; instead of grudging him a simple hospital, we should urge that public honours be decreed to him—that his name be enrolled in our glorious annals beside those of Harvey and Jenner. What, on the other hand, if it be not so; if the physician still finds with dismay the lurking death-spot—if the use of this phrase be only a trick, in short, to get subscriptions; why, then, we say, that those who drew it up wrote more in the spirit of members of the British College of Health than of the College of Physicians. They use language calculated to convey an untruth, and to impose upon the public.

Again, as though one wretched delusion were not enough in the space of a short advertisement, we find the following:—"Although many deaths have occurred out of the 194 cases which, up to the present time, have been under treatment, it is highly gratifying to report, that a large number have been greatly alleviated, *and several incipient cases discharged completely cured.*" Is there such a thing, good reader, as an incipient untruth? If so, we admit incipient cancer; but by no means its complete cure; and the staff of the Free Cancer Hospital must be daring indeed, if they pretend to have extinguished, in one single case, the cancer germs elaborated by the body. By means of the *Times*' advertising sheet, they may mount their rostrum in the market-place, and launch forth promises they can never redeem. They may impose upon an ignorant and confiding public; but the Profession cannot be so imposed upon.

Dr. Marsden and his *confrères* have no more power than other men to stop the development of this fatal disease; they have the power, however, if unchecked, of promoting a malignant growth, whose tendency, with others of a similar class, is to destroy the body medical.

Special hospitals, such as we have spoken of, are the true cancerous developments, springing up in pestilential crops in every part of the Metropolis, draining the life-blood out of the great establishments, and producing no healthy results of their own. The most objectionable of these is the "Free Cancer Hospital," now only an "incipient case;" and we shall do all that lies in our power to discharge it "completely cured."

INCOME-TAX.

For a year longer we must bear the unjust burden of the present Income-tax; and, in one form or another, an Income-tax will, without doubt, be imposed permanently on the community. The only question is, shall the permanent tax be as unequally levied as the temporary one has been? This question is one of deep interest to the miserably paid and hardly worked members of our Profession.

At the last annual meeting of the Provincial Medical and Surgical Association, a Committee was appointed to watch over the interests of the Profession involved in this matter. Some short time since that Committee issued an address "to the members of the Medical Profession." We are anxious that our readers, who are not members of the Association, should be apprised of the object of that address, and, as far as possible, that they should assist the Committee in their labours.

After recapitulating the oft-told injustice inflicted on the Practitioner of Medicine by the present Income-tax, the Address proceeds:—

"The Committee of the Association, therefore, deem it to be their duty to inform the Profession, that they are determined energetically to oppose the re-enactment of this impost. They suggest the propriety of immediately assembling the local committees, and call upon every medical man, whether he is a member of the Association or not, to co-operate with them in their exertions to accomplish the above object."

"The Committee will be happy to receive suggestions, emanating from any medical man, as to the best mode of proceeding in furtherance of their object. They will be thankful for the names of those who are willing to come forward and volunteer evidence before the Committee of the House of Commons. They will feel greatly obliged to any medical man, whose engagements will not permit him to take a more active part, to communicate his opinions to the Secretary of the Committee. And, lastly, should any individual desire that the *facts only* of his letter be made known, his communication will be regarded as confidential, and his name not allowed to transpire."

There cannot be a doubt, that, if we are to be fairly used in the new tax, our case must be urged on the attention of the Government, and that, for the accomplishment of that object, an organization of the Profession is essential. The Committee of the Provincial Association offers such an organisation; and we trust that the appeal of that Committee will be heartily responded to by the members of our Profession. All communications on the subject are to be addressed to the Honorary Secretary of the Committee, Dr. Thomas Smith, Portland House, Cheltenham.

THE SWINEY PROFESSORSHIP OF GEOLOGY.

The audacity and impudence of the mesmerists and homœopaths pass belief. With the most slender pretensions or qualifications, they rush into an arena within which ordinary men would fear to tread. Who otherwise would credit the fact, that Dr. Macdonald, of St. Andrews, known chiefly, if not wholly, to the scientific world as the supporter of the follies of Mesmer and the absurdities of Hahnemann, placed himself as a candidate for the Swiney Professorship of Geology in

opposition to Professor Grant, the first and oldest of the palæontologists of England! He has deservedly met the fate of all who arrogate to themselves qualifications they do not possess—disappointment, if not disgrace. The election took place on Saturday last. Dr. Grant was proposed by the President of the College of Physicians, seconded by Sir Philip Egerton, and unanimously elected by the Trustees of the British Museum, to whom the Professorship is entrusted. Dr. Macdonald will return to Scotland a sadder, if not a wiser man. We congratulate the scientific men of the Metropolis on this appointment. The high scientific character and eloquence of Dr. Grant are well known and highly appreciated by all who know them. Dr. Grant's income, the miserable pittance on which he has eked out existence, and at the same time sustained his independence by a wise economy, will be nearly doubled for the ensuing five years; but his friends must not, on that account, relax in their praiseworthy exertions to present him with the testimonial in the shape of a permanent addition to his income, or cease those claims on the Government for a share of the fund set apart for the reward of eminence in literature or science. We sincerely congratulate the worthy Professor on his new appointment, and we have a reasonable hope that the other efforts now making for him will be crowned with a success co-efficient to his most meritorious scientific labours.

REVIEWS.

Observations in Surgery. By Benjamin Travers, Jun., F.R.C.S. 8vo. Pp. 230. London: Longman and Co. 1852.

Much benefit would accrue to medical and surgical practice, if those only who have had an extended and ample experience, and have by this means been able to test the truth of those great doctrines which the master-spirits of the present and bygone age have promulgated, were to give to the Profession the results of their inquiry into particular measures instituted with the view of combating certain troublesome and ill-understood forms of disease. Our large hospitals may with truth be considered as the best and widest sphere for the medical or surgical philosopher to make inquiries which may lead to some safe and satisfactory conclusions. If, to large opportunities of seeing disease, a man carries with him a sound head, a reflecting and unprejudiced mind, he will gain such an amount of practical knowledge, that, by being well digested and well put together, may prove of great use to those inquirers who may not have been so fortunate in their opportunities. Mr. Benjamin Travers, from his position as Resident Assistant-Surgeon at St. Thomas's Hospital for some time, has had under his immediate observation a mass of material from which to extract facts which could be useful to the spread of surgical science. To what extent he has succeeded, those who study the work before us will be able to judge for themselves; they will find some observations on very important points of practical surgery.

The subjects upon which Mr. Travers has written are Fracture, Injuries of the Head and Brain, Diseases of the Urino-Genital Organs, Local Inflammation, and some Diseases of the Joints. On the subject of Fracture will be found some judicious and practical observations, and more especially in reference to the constitutional treatment of simple and compound fracture—an element which is, we fear, too often overlooked by the surgeon who has various cases of surgical disease under his care. Mr. Travers rightly estimates the extreme difficulty which obtains in arriving at a judicious and correct conclusion as to the question of amputation in certain compound injuries. He, perhaps, a little underrates the resources of Nature, which may be relied upon to a wonderful extent for the repair of injuries which at first sight appear to be truly formidable.

In the chapters on injury to the head and brain, some useful matter will be found; and the Author has given, at page 97, an admirable description of commencing inflammation of the brain after the reception of an injury, which, if we had space, we should quote entire. To these are added a number of instances of injury to the head, and death by commotion or shock.

The author devotes a considerable portion of the work to the consideration of diseases of the urino-genital organs. He is a strong advocate for puncturing the bladder by the rectum when that last measure is necessary. In the treatment of stricture, he objects to the use of bougies, always preferring the use of the silver instrument. Mr. Travers must either be uncommonly skilled in the use of the catheter, or can have had no good opportunity of seeing what an immense amount of mischief is daily caused by the indiscriminate use of solid instruments, for otherwise he would come to a different conclusion about their use and that of bougies. We feel certain that the metal instruments are used too frequently; that they produce vast mischief, sometimes destroying life, and at least complicating the case of stricture to a great degree; and that, in the majority of cases of severe stricture, wax bougies are the most proper and least likely to create mischief. The following are Mr. Travers's opinions about perineal section:—

"The question of cutting upon old and callous strictures has been largely discussed of late, and much that has been said might well have been spared, because the proposition is not novel in itself, and some of the moderns would extend their application of the rule to many of the cases which do not call for such summary measures. It may be roundly asserted, that so long as surfaces remain unbroken, cutting instruments should not be used in the perineal region."—P. 172.

Mr. Travers is correct in what he here states, and we confidently predict, that, in a few years, we shall hear no more of the shameful cutting operations for stricture which have of late been performed with loss of life and the greatest danger and distress to the patients; but that this measure will be confined to those instances where Le Dran and Hunter counselled and performed it, namely, when there is impassable stricture and extensive fistulæ, and change of texture in the perinæum. Here alone is it necessary; and the surgeon who performs it when he can pass a catheter, commits a cruel and unjustifiable act. It is useless to disguise the truth,—facts which have come to our knowledge compel us to speak in this way of the "perineal section," as lately adopted.

The author gives his views on lithotrity, but we do not suppose, from the paucity of cases he refers to, that he has had a sufficient amount of experience of that operation to be enabled to come to any correct conclusion about this difficult question. Still, he is certainly not far wrong in saying, that "it has not yet been proved that any better or safer plan of treatment can be adopted than that of cutting in perineo, as first performed by the great Cheselden, now more than one hundred years ago." Nevertheless, statistics of lithotrity which *may be depended on* are required, before surgeons can come to any definite conclusion as to which is the safest operation—lithotrity or lithotomy.

Some observations on local inflammation and disease of the joints finish the volume, which is creditable to the author, who has had large opportunities of seeing disease, and has evidently observed it pretty closely.

Varicose Veins and Varicose Ulcers. By T. W. Nunn. 8vo. Pp. 63. London: Henry Renshaw. 1852.

Mr. Nunn has done some service to himself, as well as for surgery, by publishing this little work, which is written in a modest and unpretending manner. He has handled the subject under consideration as a philosophical anatomist and surgeon should do; and in a small space has conveyed a great deal of information respecting the nature and treatment of varix. In the first section he has given the anatomy and physiology of the healthy subcutaneous veins. In the second part he describes the pathology of varicose veins, and their consequences; and, in the third and last chapter, the author dwells upon the treatment which has been adopted for their cure, and describes the method which he himself has put in force with most success.

The particular changes which take place in the structure and form of a vein, when become varicose, are clearly given; and, as an instance of Mr. Nunn's style and accuracy of description, we quote the following in reference to varicose ulcer:—

"The varicose ulcer is always found below the knee. It is

usually irregularly shaped, its edges are thickened, and not of a constant colour; the neighbouring tissues are indurated, leaden to the touch and eye. The granulations vary in appearance; sometimes of bright red, sometimes dull red, or dull red mixed with yellow; the condition of the ulcer in this respect depending on the intensity of the inflammatory process, and upon its complicity with other affections of the general system."—P. 39.

Mr. Nunn does not like the ordinary method of obliterating varicose veins by ligature. The objections to it we may mention in his own words:—

"Although the obliteration of a vein is very seldom followed by results of an untoward character, yet it cannot be looked upon as a sure, safe, and convenient operation, and one which in all cases can be justifiably adopted; and, secondly, often a short time after the operation, the varicosity which it is intended to do away with re-establishes itself to its former extent."—P. 45.

The author imitates, or attempts to imitate, the result which is brought about by the ligature by milder means. These are, the continued application of pressure to the vein.

"By the application of pads fitted with elastic bands, by which continuous compression may be maintained, all the advantages of what has been called the radical cure may be obtained, without any of the danger attendant on that proceeding."—P. 52.

This treatment is simple, and likely to be effectual, we should think, as it is founded upon rational and scientific principles; but Mr. Nunn has not told us to what extent he has been successful with it in his own practice, and thus his work is incomplete. Mr. Nunn has perhaps underrated the efficacy of the "strap and bandage" in varicose and other ulcers of the lower extremity, urging as arguments against this mode of treatment, that "the discharge is confined, and that, moreover, excessive suffering is often produced." Now, with reference to the first objection, it may be fairly questioned, when we bear in mind that it is in those instances of ulcers where there is not a tendency in the part to secrete much pus, the strap and bandage is so beneficial, and, moreover, the confinement of a moderate amount of discharge appears not only not to be injurious, but absolutely useful, to a prompter healing of the sore; and, as regards the "excessive suffering" which is produced, we think that if the strapping is properly applied, and in cases only which have lost the irritability and sensitiveness which obtains when they first come under the surgeon's care, but little if any pain will be experienced by the patient. In varicose ulcers especially is this treatment applicable.

We cordially recommend every practical surgeon to make himself acquainted with the contents of this little book, which, we again say, does the author much credit.

Medical Dictionary for the People. By Spencer Thomson, M.D., &c. Parts I.—IV. London: Groombridge.

Dr. Spencer Thomson is well known as a provincial physician of celebrity, and as the author of a very excellent Work on British Cholera, and of one not less excellent on Temperance and Total Abstinence. He has now commenced a Work intended not so much as a book on domestic medicine (although it includes this) as a general popular treatise on physiology, hygienics, and, in fact, everything which concerns the well-being of the community. Works of this class are of great utility. We are convinced that if the public knew more of the structure of their own bodies, and of the functions of the different organs, they would not only preserve better their own health, but they would understand and appreciate both the difficulties and the triumphs, the obstacles and the methods taken to overcome them, which render the practice of medicine the most onerous, as well as the most useful art which men can exercise. If people were more instructed, quacks would flourish less, and praise and blame would be more judiciously awarded to the practitioners of medicine than they now are. The works of Combe and of Lord are evidences of how much may be done to popularise physiology with advantage to every one, and we can pay no greater compliment to Dr. Spencer Thomson, than to say, that he seems to us to be a worthy follower of those two excellent writers, and to be doing for the practice of medicine what they did for physiology. The amount of useful information conveyed in this work is surprising, and here and there wood-cuts are put in, which nurses and persons about the sick, who cannot have the doctor always at hand, will find very valuable. Throughout, however, Dr. Thomson has shown very distinctly, that, although a little knowledge on the part of the patient may materially assist the physician, no amount of knowledge which a patient can acquire can supersede him; and there are many sensible remarks on self and quack-treatment.

GENERAL CORRESPONDENCE.

THE FRACTURE SWING.

[To the Editor of the Medical Times and Gazette.]

Sir,—I forward you the following remarks as explanatory of the mechanical means which have been adopted in the treatment of fractures, and should only feel hurt if I have assumed more to myself than was true; although, having been an observer of the various contrivances which have been suggested by different authors, I am as yet ignorant as to whether any other principles more applicable have been promoted by any of my Professional brethren.

Previously to the year 1831, the mechanical means for the treatment of fractures in use among English surgeons consisted of the straight split splint for the arm and thigh; with Sir Astley Cooper's double inclined plane for the thigh; the common leg-splint, with the outer footboard; and Sir James Earle's fracture-bed. It was in consequence of such inefficient methods, that led me then to contrive and publish what I believe, and the subsequent experience of twenty years has demonstrated, to be such as would more easily keep the fractured ends of bones in apposition, and with the least excoriating tendency of the soft parts. In reference to this latter principle, I suggested the mode of applying pressure or support as applied to tumours by Dr. Neile Arnott, namely, the compound act of a resistible against an irresistible support. The first suggestion, in reference to the apparatus for fractures then in use, was for femur; I saw the great imperfection of the double inclined plane, because, there being no security to the pelvic structure, hence rotation and shortening of the fractured limb. I therefore added a concave extremity, which allowed the the tuberosity of the ischium to rest on the bed with an impossibility of any lateral movement; and, further, to secure more fully the pelvic end of the os femoris, I added a pelvic strap. This addition effected the complete security of all kinds of fractures of the femur, and, in my opinion, superseding the straight splint by Desault. The adaptation of this principle to the thigh led me to apply the same to fractures of the humerus, by securing the lateral appliances to the scapula, making the acromion a fixed point, by means of a strap or belt passed over the upper part of the instrument, and carried round the chest, under the opposite axilla.(a) To this form of humeral splints has recently been added, by Messrs. Weiss and Co., a support for the forearm, having the advantages of a well-applied sling, and is now in general use.(b) In treatment of fractures of the radius, the hand was not sufficiently protected from the act of pronation. I had the inner splint so made as to keep the hand in a position of partial supination, as described in the twelfth volume of the *Medical Gazette*. The next defect I observed was, in the system of supports applied to fractures of the clavicle, mainly owing to carrying the arm in a sling from the neck, which led me to apply a strong leathern pad over the posterior part of the scapulæ, secured by a belt across the fore-part of the chest, to which was appended a loop on either side to suspend the hand, thereby throwing the arm backwards, and allowing the head and neck perfect freedom of movement, also enabling the patient to walk more erect; the scapulæ were fixed by two padded straps passed round the axilla and over the acromion process of the scapula. I now come to the treatment of fractures of the tibia and fibula by suspension,—a principle introduced into England by myself, in 1831. I find it is not fully understood by many, as to its great advantages. A Correspondent in the *Medical Times and Gazette*, Mr. Roberts, has just published a letter, advocating, as a new principle, the ball and socket joint to the suspension-frame of Mr. Luke. With all due respect to both these gentlemen, I do not think either have observed the simplicity of the original invention. In my work, "Facts and Observations in Medicine and Surgery," p. 31, is a letter from the late Dr. Wigan, author of the "Duality of the Mind;" I make no apology for republishing it, as it explains the subject of suspension in a practical manner:—

"It was about the year 1820, that Mr. George Young, the most successful of London surgeons, having made a fortune perfectly

(a) Vide *Medical Gazette*, Vol. XII.

(b) Since my publication of this splint, in the twelfth volume of the *Medical Gazette*, with the other forms of fracture apparatus for fractures, they have been much simplified, and the cost greatly reduced.

unprecedented by any man not attached to a hospital school,—returned from a tour in Germany. He had entirely relinquished his practice, but still took great interest in suggesting improvements to his professional friends, and, in the course of one of his friendly explanations, showed me an apparatus, which he had witnessed in Germany, for the management of fractures. It was a shelf, suspended by four cords from the corners; and he spoke in the highest terms of the advantages it possessed over the ordinary modes of management, that the limb being suspended, enabled the patient to get out of bed without disturbing it. It was in vain that I endeavoured to comprehend its advantages; and, being a tolerable mechanic, I could not help regarding it as a clumsy contrivance, and thought no more about it. My practice in London had a very small admixture of surgery, and the thing passed away from my memory.

"In the year 1826 or 27, I resided several months at Lausanne, where the apparatus was pointed out to me by Mr. Mayor, the surgeon to the hospital there, as the invention of a German, not, I believe, a medical man. I now saw that Mr. George Young had repeated the old story of the French cook,—he had made the plum-pudding quite correctly, but omitted the cloth,—he had shown the mode of suspending the broken limb, but had forgotten that four points of suspension allowed no motion, and entirely neutralized the principle; that it was only on tying all four together, at a convenient distance from the board, that you obtained the *universal joint* of mechanics—the ball and socket.

"The moment I saw this, I comprehended in an instant its numerous advantages, and found that it might be rendered useful in a great variety of cases, not merely fractures of the lower limbs, but of the arm and many other injuries; might be the means of preventing anchylosis, by removing the necessity of confinement to one position, etc.

"I saw it employed in many cases at Lausanne, and was the means of introducing it into some parts of Italy and France; but, although I had often seen patients get in and out of bed without any assistance, and without risk of disturbing the limb, and spared no asseverations to convince, it was rare that I could get any one to comprehend fully the extreme simplicity and perfection of the apparatus, and I was often unsuccessful. I have observed all over Europe, that surgeons are miserable mechanics, and have seen many apparatus by common bone-setters, Greeks, Germans, and Dutch, which would shame our hospital surgeons.

"On my return to England, I endeavoured in vain to get the plan adopted in various hospitals, but as I soon after left London, and removed to a country town, it is not surprising that I was even less successful there; for although it contained a hospital and a large population, it was not large enough to remove the jealousy which is the besetting sin of the Profession. I should believe that I myself partook of the feeling, if I did not know that '*oneself*' *is always exempt from prejudice*, and that it is only 'others' who are influenced by that odious defect.

"In passing from Lausanne into Italy, I found a lady (the Hon. Mrs. H.) at a miserable cottage in the high Alps, who had been six weeks on the floor, having broken her leg by the fall of the mule, in passing over the Wengern Alp. Serious injury was coming on in various parts of the body, from confinement to one position. On the application of the new apparatus, she was immediately able to rise; her gratitude was unbounded, and her recovery so rapid, that a few weeks afterwards I encountered her at Milan, quite restored.

"For many years I have given up surgery altogether, and do not know whether the plan I speak of is become more general—it well deserves to be so; but I believe it is the very simplicity of the contrivance which constitutes the obstacle to its adoption.

"Dr. Mayor never claimed the merit of the invention, but he made great efforts to teach the peasantry of the mountains the use of the apparatus, which was within the means of every one to construct—a matter of importance in their insulated life, where they could not procure surgical aid at any price, (even if they could afford it,) for five or six months together.

"The mode of fastening which I saw in Switzerland was rather clumsy and complicated. I substituted the *guy*, which I think is an improvement." I am, &c.

JOHN GRANTHAM, F.R.C.S.

THE UTERINE SOUND.

[To the Editor of the Medical Times and Gazette.]

SIR,—I must once more, and for the last time, beg for a space in your columns, in reply to "M.D. Londin.," an indulgence I would not have asked for had not this Correspondent endeavoured, in his last communication, to fix on me three sufficiently unpleasant faults: 1st, of malpractice; 2ndly, of loss of temper; and, 3rdly, of a desire to shirk fair discussion. Before, however, I proceed to notice this attack, I will briefly recapitulate the facts and circumstances of our controversy, in order that the Profession may see the tone and manner in which "M.D." exercises his self-imposed duties of anonymous critic, and the advantages it is likely to obtain by his ascertaining for it whether "published statements bear the interpretation put upon them."

Some time during October and December of last year, Dr. Rigby, a gentleman as much esteemed for his private worth as he is respected for his professional attainments, published in your journal sundry cases of obstructed dysmenorrhœa, which he had diagnosed by means of the uterine sound, and treated instrumentally, etc. On the 21st February of the present year, "M.D. Londin." thought proper to comment on these cases, at the same time impugning the morality, decency, and propriety of Dr. Rigby's proceedings.

Now, that there may be no mistake on this point, I will quote from "M.D.'s" own paper. He says: "Sir,—In the leading article of your Journal for February 7, you justly reprobate the very improper use of the speculum, in the treatment of uterine diseases, adopted by some physicians. . . . But, while you lend your powerful support to the suppression of such abominations, alike uncalled for by the nature of the disease, and demoralizing to the female subjected to them without just cause, you admit a series of articles, on 'Dysmenorrhœa,' signed by the time-honoured name (in midwifery) of 'Edward Rigby, M.D.,' which are scarcely less mischievous in their tendency than the statements and practices so justly condemned." Again, in the third paragraph, after commenting on Dr. Rigby's mode of treating this class of cases, we have: "Hence, a young virgin female, who suffers from pain 'only a few hours' before the appearance of the catamenia, is to have her person exposed, her delicacy violated, her uterus forcibly dilated by 'blades made of well-tempered steel,' or slit open with a knife ingeniously contrived for the purpose. Was there ever a more monstrous proposition put forth in sober earnestness?" Not contented with this, "M.D." next attempts to fasten on Dr. Rigby a charge of ignorance or of falsehood, inasmuch as Dr. Rigby had stated, that, in the case of Miss B., aged 36, where he found a diminished os and cervix uteri, he had passed the uterine sound to a distance of "rather more than two and a-half inches," subsequently "dilating the os slightly, when some brownish bloody-coloured fluid came away," with ultimate relief to the malady. "But," says "M.D." "the new point worthy of note is, 'the uterine sound passed more than two and a half inches.' To have passed so far, it must have penetrated the os uteri internum; and, as it is surmounted by a bulb, which measures from a quarter to half an inch in diameter, this bulb must have passed through the orifices of the uterus. Now, in the healthy condition, these orifices are not so large as to admit an instrument of this size to pass, and hence, according to Dr. Rigby's report, those parts were morbidly enlarged, not contracted. The escape of 'some brownish, bloody-coloured fluid' would, as already stated, follow the introduction of the sound, and no facts are given to show that it was catamenial fluid." Twice professing to quote the words of Dr. Rigby between inverted commas, "M.D." omits the word *rather*—"the uterine sound *passed more than* 2½ inches." For what purpose is this inaccuracy—this omission?

All this, with true self-respect, Dr. Rigby has treated with the silent contempt which it deserves; but, I ask, is it right that he, or any other professional man, wishing to record the experiences of his observation, should be subjected to such attacks from one who has not the courage to fight in his own name, under the plea, "that published statements should be freely examined, and that this can be done as well under one name as under another;" that is, as well by one who, using an assumed name, incurs no responsibility, nor gives any voucher for accuracy or truth, as by him who honestly affixes his signature and awaits boldly the consequences of his conduct.

Being at this time engaged on a paper in defence of a much-abused and misunderstood instrument, and believing, as I still do, that "M.D. Londin.," was either disparaging an instrument of which he was entirely ignorant, or knowingly mis-stating its size for some unfair purpose towards both Dr. Rigby and the instrument, I asked, in a note appended to my paper on the Uterine Sound, when and where he, "M.D.," had seen such an instrument, etc. (See *Medical Times and Gazette* for February 28.) Three or four weeks afterwards, "M. D. Londin.," endeavours to shuffle out of the manifest blunder he had committed, by saying, that I had corrected him of a "serious typographical error," (see his letter of March 27th.) "The bulb of the uterine sound is stated," says he, "to be half an inch in diameter; it ought to be half an inch in circumference." Now, in this apparently candid confession of error, "M.D." was guilty, as I pointed out on the 17th of April,"

of a direct *suggestio falsi*, through the common medium of a *suppressio veri*. His original measurement of the sound was from a "quarter to half an inch in diameter;" but, when commented upon for this, he deliberately omits all reference to the quarter inch diameter, and endeavours to draw away attention from his exaggeration by stating, that instead of half an inch in diameter, he meant to say half an inch in circumference. It is also rather remarkable, that though he has impeached the veracity of the "time-honoured" Rigby, on the express consideration that Dr. Rigby had professed to have used an instrument too large for the natural calibre of the parts, &c., he has not once volunteered a regret towards Dr. Rigby for a typographical error, as he calls it, fraught with such serious consequences, but has been solely occupied ever since in an ingenious, but too transparent, attempt to wriggle himself out of the difficulty, by drawing attention to his largest measurement only—"I should have said half an inch in circumference, not diameter," thus trying to accommodate his next trial at a description to a plain *ex post facto* examination of the uterine sound, as well as to the accurate measurement of it which I had given. And, let me observe further, that he has not yet, in spite of his show of candour, attempted any explanation of what he meant to convey by saying, that the bulb varied from "a quarter to half an inch in diameter," though I have, in a former letter, challenged him to do so.

"There are no tricks in plain and simple faith."

As to "M.D." 's criticisms on certain cases of mine, and the various charges he has founded on them against me, I am quite indifferent. I have received too many letters on the subject of my paper, both from London and elsewhere, to permit me to feel any anxiety on that score; but I must allude to one specimen of his criticism, which occurs in his last letter, where he attempts to show that my treatment of obstructed dysmenorrhœa was as "uncalled for, and consequently as improper," as Dr. Rigby's, (see p. 449,) wherein he complains of my professing to have discovered stricture of the os internum uteri by the sound; and insinuates, what I have nowhere stated, that I had in this case passed the instrument through the uterine canal, which I did not do; for, surely, as with the male urethra, a stricture, or contracted condition of this canal may be ascertained, without penetrating the constriction, by the obstruction which the instrument receives at the narrowed part. This he ought to know; but, alas! it is too clear that his criticisms are altogether of the "*sic volo, sic jubeo*" kind. If the escape of a "brownish, bloody-coloured fluid" from a dilated os and cervix uteri be not an indication of a canal, (whether quite pervious or not,) preternaturally and relatively too small for its purposes, I ask what it is an indication of? If this discharge be not evidence of retained menstrual fluid, what is it? I unhesitatingly repeat, that the proper dimensions of the uterine sound, as given in my paper, are not too large for a normal uterine canal; and that the uterine canal, just as the male urethra, need not be entirely closed to produce a serious functional derangement of the catamenial secretion.

I suspect "M.D. Londin." has long been

"Letting down buckets into empty wells,
And growing old in drawing nothing up."

As to my loss of temper, I confess I am not myself conscious of it. It is an old saying, that none are so apt to accuse others of being drunk as those who are themselves intoxicated; at any rate, none more commonly believe others angry than those who are so themselves. No, Sir, I am not angry, but sorry—sorry that, in a Profession so calculated to engender all that is honourable, and accurate, and generous, there are to be found persons, some even grey-haired, who are not only capable of, but absolutely take pleasure in, loose statements, exaggerated descriptions, and vilifying comments,—in fact, in "construing things after their fashion, clean from the purpose of the things themselves,"—that these ungenerous attacks should be directed, not only against the humbler members of the Profession like myself, but reach even the "great ones of the city," the Rigbys, Simpsons, etc., etc.

I have no desire to avoid honest and fair criticism of any and every act and production of mine; but I will not subscribe to the doctrine, that it is either necessary, convenient, or proper, that an anonymous writer should

"have a liberty
Withal, as large a charter as the wind,
To blow on whom he pleases."

But I am also accused by "M.D." of a convenient shirking of discussion on the subjects of our communications. Now, on this point I beg distinctly to state, that if "M.D. Londin." be not afraid or ashamed to write in his own name, I will pledge myself, on the honour of a gentleman, to discuss these matters with him dispassionately, and without any more reference to diameters or circumferences, commencing, if he pleases, with the differential diagnosis of pendulous tumours of the uterus and pregnancy in the ninth month. If he decline my challenge, he must pardon me if I resolve not to notice anything further from his pen unless authenticated by his proper signature, however unfounded, uncandid, or ridiculous it may be. I am, &c.

Birkenhead, Cheshire. CHARLES HAYES HIGGINS.

BETHLEM HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

SIR,—Some insinuations having been thrown out in the public papers as to the causes which have induced the Governors of Bethlem Hospital to propose some additions to their medical staff, may I request that you will do me the favour to insert in your journal the following letters referring to the subject.

These I conceive will at once vindicate the present medical officers from every shadow of supposed imputation as to the performance of their official duties.

These changes purely result from long-standing intentions on the part of the Governors, and (as will appear from their own letter) have no connexion whatever with any report received from the Commissioners in Lunacy.—I am, Sir, &c.

EDWARD THOMAS MONRO, M.D.

87, Harley-street, Cavendish-square.

TO THE PRESIDENT, TREASURER, AND COMMITTEE OF THE ROYAL HOSPITALS OF BRIDEWELL AND BETHLEM.

MY LORDS AND GENTLEMEN,—We have heard that a special meeting of the Committee is to be held at Bridewell, on Monday next, to consider and report what should be the duties, salary, and emoluments of the Resident Physician of Bethlem Hospital, *and upon no other business*; and it is further rumoured, that a special general court is to meet on the following Monday, to confirm the resolutions of the Committee.

As no other business than that above referred to is to be considered, we have no other means of obtaining a hearing than by addressing the individual members of the Committee; and the urgency with which important changes in the medical staff of the hospital are to be carried out, without our being informed of any ground of complaint against the present officers, seems to justify this course.

If the changes which the Governors have resolved to make have been determined on in consequence of a report which has been made to the Secretary of State by the Commissioners in Lunacy, we most respectfully claim the right to be informed what the report is, and the evidence upon which it is founded.

We feel that we can confidently challenge comparison between the condition of Bethlem Hospital and that of any similar Institution; and those Governors who have attended the Sub-committee and visited the wards have uniformly expressed their opinion of its good order, and the satisfactory state of the patients generally, in a book under their own hands.

The cures during the last seven years have not only equalled, but exceeded, those of any corresponding period since the hospital was founded. Mechanical restraint has been gradually diminished, and at last altogether discontinued. Upon these grounds, we earnestly appeal to the Committee, whether changes which must necessarily degrade us all, and in our persons dishonour our profession, should be thus hastily made, without giving us the opportunity of defending ourselves against any charges which may have been made against us.

We have the honour to be,
My Lords and Gentlemen,
Your faithful servants,
ED. THOS. MONRO, M.D.
ALEX. MORISON, M.D.
WM. WOOD, M.D.

Bethlem Hospital, 30th April, 1852.

Bridewell Hospital, May 7, 1852.

Gentlemen,—I beg to inform you that your letters of the 27th and 30th of April last, and the 3rd of May instant, with an enclosure addressed to the President, Treasurer, and Committee of Bethlem Hospital, were laid before them, and read at their meeting this day, and I am directed to acquaint you, in reply, that the Committee are very desirous of removing, as far as lies in their power, any impression on your minds, that the proceedings which they have taken with reference to the appointment of a resident Physician, are the result of the acquiescence on their part with the Reports of the Commissioners in Lunacy to the Secretary of State for the Home Department.

The appointment of a Resident Physician and Medical Superintendent, which was unanimously agreed to by the Committee and unanimously confirmed by the last Court, had long been felt by the President and Treasurer, and many Governors who have devoted much attention to the administration of Bethlem Hospital, and who possess considerable experience in the direction of similar establishments, to be a necessary and desirable alteration in the system pursued at Bethlem Hospital, where, in consequence of the number of patients having doubled since the appointment of the present Physicians, the introduction of employments on an extended scale, the classification of the patients under the charge of numerous subordinate officers, and the increased duties involved in the improved and daily improving treatment of lunatics, a degree of constant supervision at all times, direct control and undivided responsibility, was imperatively demanded, which it was not in the power of any non-resident physicians under the present system to secure.

It is both the duty and the desire of the Governors to afford any officer who may feel himself aggrieved, the fullest opportunity of explanation and defence; and, had the Report and evidence complained by the physicians been a document under the control of the Committee, they would most readily furnish them with copies; but the physicians are aware, that the investigation originated with the Commissioners in Lunacy, and that, by the express and positive direction of the present Secretary of State, the evidence must be confined in the strictest confidence to the members of the Committee. As the Secretary of State is alone empowered to furnish the physicians with copies of the Reports and evidence, the Committee can only refer them to that authority for compliance with their request; should they, however, wish to submit any statement on the subject, the Committee will receive it, and give it their best consideration.

The physicians will thus understand, that the Committee have not entered upon the consideration of that Report, and that, therefore, no opinion has been expressed by them on the several conclusions at which the Commissioners in Lunacy may have arrived; and although it is true, that the present medical staff is stated to be insufficient in resident officers for the due management of the hospital, that is a defect in the system, as before stated, which they have long intended to remedy when an opportunity occurred.

I am, Gentlemen, your obedient Servant,

B. WELTON, Clerk.

To Dr. Monro and Sir Alexander Morison,
Physicians to Bethlem Hospital.

DR. BACHOFFNER'S NEW FIRE.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the last Monthly Number of the *Medical Times and Gazette*, I perceive, at page 355, a notice of "Dr. Bachoffner's Fire without Coal." By the name, I presume Dr. Bachoffner is a German. However much I may admire his ingenious experiments, I cannot, in justice to myself, allow the opportunity to pass without informing you, that a British medical man established that principle upwards of twenty years ago, when he was a medical student in Edinburgh University, the particulars of which will be found in the *Edinburgh Philosophical Journal* of the time. I beg to enclose a notice from the *Scotsman* that was taken of my experiments, which, if you would place in juxta-position to those of Dr Bachoffner, will explain the whole matter.

I should feel much obliged if you would transfer this notice to the pages of the *Medical Times and Gazette*.

"Let the reader imagine a tin lamp of the ordinary form, the cavity of which is filled with strong spirits instead of oil. A cotton wick lies among the spirits. One end of it is brought through the orifice or mouth of the lamp in the usual way, and the different threads of which it consists are separated, and spread out a little, so as to leave a sort of cavity in the middle. Into this cavity is placed a coil of platina wire, of a cone shape, formed by five or six spiral turns of wire. The wire is about the hundredth part of an inch in diameter, and the coil forms a sort of cup, about $\frac{3}{8}$ths of an inch wide, in the middle of which lies a small piece of spongy platina. The lamp being filled with spirits, the wick is to be inflamed: in about a minute the platina becomes red hot; the flame is then blown out, and the glass cover placed over the lamp. The use of this cover is to confine the heat, and prevent all cross currents, so that no air may reach the platina, except what passes in by air-holes below, and escapes by the chimney or opening in the cover above. If the lamp is standing in a chamber somewhat darkened, the platina will now be seen constantly presenting that glowing or incandescent appearance which we observe in red-hot iron. The light is strong enough to enable one to see the hour on the dial-plate of a watch at midnight, but produces no annoying glare. The spirits are decomposed and fly off, forming, as Mr. Merryweather thinks, water and acetic acid.

"Such is the lamp in its simplest state, that is, when consisting merely of one burner. If a greater heat is wanted, three, six, or more burners may be placed upon one lamp. In the lamp exhibited to the Royal Society, Mr. Merryweather employed fifteen burners, placed near one another; and with these he maintained a perfectly constant temperature of 396° Fahr. We call it a lamp, but when fitted on this scale, a furnace is the more appropriate appellation. He was informed that this was a very desirable heat for many chemical or pharmaceutical purposes; but he could, if necessary, raise it to 1000°. He found that the platina wires and sponge undergo no sensible waste, and observes that, by connecting a reservoir of spirits with the cavity of the lamp, the heat might be kept at the same uniform elevation for years. Pure alcohol is not necessary. He finds that whiskey 22 per cent. over proof, 9s. per gallon, answers perfectly well. With fifteen burners, producing a temperature of 396°, the quantity of spirits consumed in twelve hours costs 1s. 3d.; with three burners, yielding a heat of 160°, the cost is 3d., which is not great, if compared with the expense of attendance when the same object is obtained by means of common fuel. It may be proper to mention, that the glass cover placed over the lamp with fifteen burners, was a cylinder about seven or eight inches wide, and ten or twelve inches high; and the heat alluded to was kept up within a space of this extent, which was empty, and of course available for experiments."

I am, &c. GEO. MERRYWEATHER, M.D.

Whitby.

THE CAUSES OF CALCULI.

[To the Editor of the Medical Times and Gazette.]

SIR,—The letter in your Number of last week, from Mr. Henderson, of Curzon-street, and enclosure from Dr. Leydig, of Mainz, opens an interesting and important question, which I hope will not cease to be mooted, until some more exact information than has yet been placed before the Profession is elicited. So general an announcement as is contained in those two epistles is startling, considering the nature of the complaint it refers to. I speak from reminiscences, but my impression is strong, that by far the majority of cases of calculus happen either in very young subjects, or in persons somewhat advanced in life. The varying nature of calculi further point to some causes susceptible of greater variety than the mere habit of drinking certain wines, which at least, it is to be supposed, the infants in whom this complaint appears do not. My own observations lead me to believe, that neither the kind of water nor the wine drank habitually have much to do with the matter, that is, so far as they aid or impede the functions of digestion, and influence the transpiration and secretion from the kidneys. I have every reason, as I will presently show, to believe that a wine may produce calculus; but I very much doubt any such liquid having a general preventive power independent of the habits and constitution of the individual; and if I might hazard a conjecture, to induce others to publish the results of their own experience, I would suggest, that a moist and changeable atmosphere, with sudden exposure to cold, may form a principal cause of this disease in infants, owing to a peculiar diathesis, and that habits such as are known to produce gout, as inactivity, repletion, and astringents, are most frequently the origin of this disease in more advanced life. There are still many circumstances, which, as accidental causes, operate in numerous instances; and we all well know, that a very slight exudation or extravasation in any of the urinary passages, will prove a nucleus, when the secretion is either overcharged with any of its peculiar saline ingredients, or impeded, so as to permit their abnormal deposition internally. Of all bodily sufferings, I think it is the most serious and excruciating. I speak from personal experience. If you consider my own case of sufficient interest to afford any clue to the solution of the general question, you can make what use you like of it. Although it tends to the supposition, that certain wines, or wine in a certain condition, may produce calculus, I do not know that it bears more upon the subject than illustrating how accurately the cause and progress of such a case may be followed, when all the circumstances connected with it are taken into consideration. In the year 1837, I was engaged in some experiments on the production of wine from unripened grapes and other materials. I then made an effervescing wine, which was bottled, and opened at somewhat too early a period. A friend who was with me examining this wine, approved it, and I took some glasses of it, having dined. I was soon after seized with what I considered at the time a violent attack of rachialgic colic, which I attributed to something I had eaten, hardly suspecting this new wine had much influence in the matter. The attack disap-

peared under simple measures. A year or so after I felt some pain in the region of the left kidney, which gradually took the course of the ureter, clearly indicating the cause. This became intolerable at the valvular entrance of the ureter, until the passage through the valve was effected. Then commenced the usual symptoms of vesical calculus. First occasional, next frequent sudden stoppages of the urine, which nevertheless found a passage as through a severe stricture. I at length determined, instead of continuing my efforts to empty the bladder upon the next occasion when the calculus should become impacted, to cease all endeavours, and allow it, by position and relaxation of the muscles, to enter the canal. I have no doubt it will be considered a hazardous experiment. It succeeded, however, completely, for, upon the bladder becoming well filled, my efforts at once expelled the stone. From its colour and roughness I concluded it to be of the mulberry species; but, upon present inspection—for it is before me—I consider it an unusually rough specimen of lithic acid. While upon the subject, I may refer to a case I once had, leading me to believe some instances of calculus may, as formerly asserted, have been cured by the process afterwards recommended, and at one time freely resorted to for relieving irritable bladder, viz., injection of warm water by the double catheter. When practising abroad, a woman presented herself for advice, complaining of constant pain in the perinæum and surrounding parts. The surgeon of the 17th Regiment was dining with me, and I went from table to see the patient. I felt convinced from the first, that the cause was a vesical calculus; but, having a friend so near, and thinking it a case which would require some manipulating aid, and that my friend would feel interest in assisting me therein, I requested him to see the woman also. He differed with me, and pronounced an opinion, that the mischief was rather referable to some disease of the rectum, which should first become the matter for consideration. We freely expressed our views. A few days afterwards the patient returned to me in great agony, with a calculus, about the size of a horse-bean, just presenting from the urethra. This was easily removed with a pair of dressing forceps; and, a sound being introduced, another of considerable size was discovered. Shortly after, by dilating the urethra, this was broken and extracted piecemeal with a pair of bullet-forceps. Some of the fragments, being covered with mucus and tinged with blood, were put into a glass of warm water to cleanse them for preservation. I soon perceived they were falling away, and dissolving in it like lumps of sugar. I therefore collected all I could, and have still nearly all that remained undissolved. I submit we may hence hope, that, at least in some cases, when the indurated exterior of some of the calculi composed of the lithates is penetrated by crushing, the more difficult process of extraction may be facilitated by solution,—if, indeed, we may not expect, by persevering endeavours, to give relief more frequently by diluted injections of chemical solvents. I am, &c.

12, Finchley-road. HENRY JEANNERET.

MEDICAL NOMENCLATURE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Every suggestion or fact regarding variola and vaccinia is of some importance at present, when their prophylaxis is so prominent a subject of study. Concurring with Dr. Gregory on one important point,—that it is quite essential that the process of vaccination should be a legislative injunction,—I at the same time differ with him entirely on his general deductions. It is probable, indeed, that, had not Dr. Jenner so confidently offered his aphoristic pledge, Dr. Gregory's paper would not have been written, inasmuch as it is mainly based on general disappointment—the frequent failure of vaccine prophylaxis. But this is not quite the fair mode of argument. We should form our judgment, not on the failure of the full premises, but on the amount of blessing which vaccination has really conferred on mankind, quite independently of Dr. Jenner's premature confidence. But the real number of these failures is immensely below what the public is unwisely led to believe; and the avoidable causes of the great majority may be at once satisfactorily explained. The Epidemiological Committee has been for some time engaged in the framing of its Report, and in this statement I would beg to suggest to it the adoption of terms and definitions which may be more appropriate and intelligible than those now employed. The word "inoculation," for instance, should be discarded, and "variolation," in contrast with "vaccination," adopted in its stead. The term, "varioloid," is altogether a mistake; modified variola *is* variola in a slighter and less malignant form; therefore its diminutive, "variella," is the proper word. There is at this moment an extensively-prevailing error on this point. The Report of a learned society may at once insure the adoption of these and many other terms to which I might allude. I am, &c. WALTER C. DENDY.

St. James's-park.

INGROWING TOE-NAILS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I wish you and your surgical correspondents would devote some little time and space to the consideration of the best curative means in the case of ingrowing toe-nails. "Who shall decide when doctors disagree?" I find Mr. Erasmus Wilson, a first-rate authority in diseases of the skin, objecting (in his treatise) to the scraping of the surface of the nail; while Mr. J. F. South, in his allusion to the subject, recommends the scraping of the nail to the thinness of a sheet of writing paper, in order to restore its elasticity; while he objects, at the same time, to the plugging of the nail with lint or cotton-wool; whereas almost all chiropodists invariably adopt that method of preventing the nail from imbedding itself in the flesh. Some surgeons use the lancet freely; others refuse to cut, except when ulceration has actually commenced. Some, again, will take off half the nail, while others content themselves with the removal of a lateral section, etc. I have a sad case in point, of nearly two years' standing. The patient, a young man in excellent health, and about thirty-two years of age, suffers from a tendency of the great toe-nail, on each foot, to grow too convexly, and so to penetrate the flesh on the external side. In the more aggravated case (that of the right foot), the proximate cause of the evil appears to have been the pressure of a tight (or short) shoe, which thrust the fleshy part of the toe upwards, and over the side of the nail, so that the latter, instead of growing on the surface of the skin, as in the normal state, became imbedded (convexly) in a cavity of the flesh, and, after the lapse of a few months, provoked inflammation and ulceration. In April, 1851, (nine months after the first slight inconvenience had been experienced), a small section was taken (with the lancet) from the side of the nail, but hardly sufficient to relieve nature; added to which circumstance, a splinter was left, which gradually grew forwards, and in the ensuing month of August transfixed the fleshy cavity, and produced an ulcer of the most exquisitely painful kind. Poultices and caustic having been applied in vain, a larger section was taken off by means of the lancet; the sore, which had been open and suppurating for nearly ten days, healed up immediately, and the patient enjoyed a respite of ease for about three months. In Dec., 1851, however, the side of the nail had grown up so far as to oppose a somewhat sharp angle to the flesh in which it was still partially imbedded, and slight inflammation supervened. In this state of things the patient applied to another surgeon, (of general skill and experience), and this gentleman determined to treat the case as follows:—Having cut away a sufficient portion of the nail—enough, *i. e.*, to relieve the soreness of the part—he scraped its ingrowing convex side to the greatest possible thinness, and as the new nail (or, rather, the new section of the nail) grew up, he continued to scrape it daily, from the matrix upwards, plugging the free edge and the adjoining angle with a pledget of lint; the object being to make the new nail sufficiently elastic to shoot over the fleshy cavity above-mentioned. The toe was also washed, twice a-day at least, with a strong solution of alum, for the purpose of corrugating the epidermous tissue, and enabling it to resist the pressure of the nail. The operation with the lancet and scissors took place in December last; the nail has now grown up to the critical point; the angle again tends to transfix the flesh, and occasions, at times, some slight soreness; but it is hoped and expected, (the nail being daily scraped at the side and near the matrix,) that the cure will be completed, and further operation with the lancet be avoided. Should the hope of the surgeon be disappointed, he proposes to take off half the nail, as the only radical remedy. I will take care to apprise you of the final result, and meanwhile shall be glad if some of your correspondents will communicate their ideas on the subject. This disease of ingrowing nails is a fearful one, and more common than many suppose; while neglect on the part of the patient too often necessitates a cruel and torturing operation. I am, &c.

Homerton, near Hackney. PHILO-CHIRURGUS.

IMPORTANT COUNTY COURT DECISION IN FAVOUR OF THE MEDICAL PROFESSION.

[To the Editor of the Medical Times and Gazette.]

SIR,—The following is the report of a case lately tried in a County-court in this neighbourhood, and, as the decision given by His Honour the Judge is a rather important one to the members of

the Profession, who, like the plaintiff in this case, may, in order to establish their just rights and vindicate their characters, be compelled to sue parties in the local courts, you will, perhaps, do some good by inserting the particulars of this case, as the verdict given was a triumphant one, and does great credit and honour to the learned and worthy Judge. You would hardly believe it, Mr. Editor, that a Fellow of the Royal College of Surgeons, employed by the parties in question, came forward on the occasion of this trial, in favour of the defendants, for the purpose, if possible, of invalidating the very moderate charge made, by stating it to be too much! but the Judge would not hear him.

Bath. I am, &c. MEDICUS.

CASE.—On the 21st ult., a case which excited considerable interest was tried at the Chippenham County-court, before C. Smith, Esq., Judge. The action was brought by Dr. John Hanmer Sprague, as surgeon and general medical practitioner, against Isaac Ball, a policeman of the Great Western Railway Company. The plaintiff had attended Ball's wife and four children in malignant scarlet fever, the cases being some of the severest that occurred during the prevalence of the epidemic at Box in 1851; and, for attendance twice—and sometimes three times—a-day for a period of one month, a charge of one pound only was made, the medicines supplied being charged at one-half the usual surgeons' and apothecaries' prices! The bill amounted altogether to 4*l.* 19s. 6d., but this included a charge of 1*l.* for attendance, and dressing an extensive and severe wound of the thigh of a boy—the eldest son—who was run over by a cart, and for seeing him safely conveyed to the Bath Hospital, where he died in a few days after. This item appeared to be the principal bone of contention; but plaintiff, after giving more than twelve months' credit, had offered to take off ten shillings from his charge, provided the defendant agreed to pay, and, moreover, would have consented to receive it by small instalments. The defendant, however, instead of coming to any arrangement or settlement, had gone about making an entire misrepresentation with regard to plaintiff's charge, which he stated to be enormous! Plaintiff had been subjected to much abuse in consequence, and, in vindication of himself, he had found it requisite to bring the case before the Judge of the County-court. Several highly respectable medical practitioners testified to the "very reasonable and extremely moderate" nature of the charge made, as the attendance altogether extended over a period of three months; and, among the testimonials produced in court, were two from Messrs. Norman and Gore, surgeons to the Bath United Hospital. His Honour the Judge was pleased to state, that, during the whole of the time he had sat on the Judicial Bench, he had never seen a more moderate, reasonable, or just account, especially as it was proved, by the defendant's own admission, that he was in the receipt of a weekly income of twenty-five shillings, besides having all his clothing found him, and 5*l.* a-year paid by the Railway Company towards house-rent. Defendant also cultivated land, and kept pigs, etc., and therefore his income was more than equivalent to a medical man with 150*l.* a-year. His Honour remarked, that he only regretted that Dr. Sprague had not done justice to himself by charging much more; for, if he had charged double the amount, he should have felt it his duty to have awarded it, considering the nature of the services rendered; and there was no impeachment of skill, nor could the claim be justly disputed. His Honour, addressing defendant's attorney, said, he had been altogether misinstructed in the case, which he at once admitted. Dr. Sprague had done all in his power that a man could do to avoid bringing the defendant into court, and putting him to expense, which was much against his wish; but the fact was, His Honour said, it was evidently an attack upon character, in order to evade payment, and plaintiff had been compelled to seek redress. It was in self-justification that Dr. Sprague had brought this action; and, although he had generously offered to take off 10s. from his account, he should now allow him the original sum claimed. He only regretted it was not much more, for Dr. Sprague's sake. Medical men must be paid for their time and attendance on cases, as well as for the medicines supplied, which could not remunerate them; and he should always feel it to be his duty to support and uphold the welfare of the Profession.

A verdict was given in favour of the plaintiff, with costs, payable by monthly instalments of 1*l.*

LOOK AT HOME.

[To the Editor of the Medical Times and Gazette.]

SIR,—Nothing can be more useful than an examination of ourselves and our belongings.

In a church, the other day, I observed a stethoscope inside a hat, in so prominent a position that none could help seeing it. A physician, long since dead, spoke invariably of the stethoscope as "the trumpet;" and such, in the present instance, was, no doubt, the use intended to be made of it.

Now, Sir, could you not suggest to the merchant tailors, that they would confer a favour on the public by the invention of a convenient pocket, so as to remove the danger now incurred by heavy persons sitting on their stethoscopes, as this has been stated to be the reason why stethoscopes go to church in a hat.

I am, Sir, &c. X. Y. Z.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. HODGSON, Esq., F.R.S., President, in the Chair.

ON FIBRINOUS DEPOSITS ON THE LINING MEMBRANE OF VEINS.

BY HENRY LEE, Esq.

SIMPLE inflammation of the veins—that is to say, inflammation commencing in the coats of the veins—is regarded by the author as a very rare disease. The internal lining of veins especially would appear to be as little susceptible of inflammation as any structure in the body. The large number of instances of phlebitis met with in surgical works, and occurring in daily practice, are regarded by the author as depending upon, and as being excited by, a vitiated condition of the blood. This opinion is principally supported by the two following facts: first, that in every case of so-called inflammation of the veins, the blood will be found to have coagulated in the vessels; and, secondly, that where such coagulation does not take place, no inflammation will be produced. Continental writers of the highest reputation have, indeed, mentioned the concentric layers of lymph which are secreted as the result of inflammation in the interior of veins; and English writers, whose names carry with them the greatest authority, have described the adhesion of the opposed sides of veins by lymph secreted from the capillaries under a state of inflammation. The advocates of this view have particularly referred to an experiment by M. Gendrin, in which he mentions, that, by introducing irritating substances into the arteries and veins, he obtained large deposits of lymph upon their interior. The author, on the contrary, having found that inflammation of the coats of the veins only occurred in cases where the blood has previously coagulated in them, was induced to believe that the deposit found in the veins might be derived directly from the blood. M. Gendrin's experiment was therefore repeated, precautions being taken to exclude all blood from the vessel; and it was found that under these circumstances no lymph was effused in the vein. The lining membrane of the veins does not contain any blood-vessels of its own, nor does it require any, being in direct contact with the blood. It appears reasonable to suppose, that, under such circumstances, it would not secrete lymph, and the experiments and observation of the author lead him to this conclusion. The lining membrane of a vein, the outer coats of which are inflamed, may undergo various changes, or may be disintegrated, and cast off into the cavity of the vessel. Lymph and pus may then be secreted into the interior of the canal; but this can only occur in the latter stages of the disease. The readiness with which some morbid poisons produce coagulation of the blood, and the constancy with which such coagulation (indicated by the cord-like induration of the vessel) is found to precede the other symptoms of inflammation, lead to the conclusion, that a vitiated condition of the blood is the common cause of phlebitis. Under such circumstances, although the irritation produced is caused by the morbid matter detained in the vein, yet the inflammation is at first manifest in the surrounding parts. The cellular tissue becomes distended with serum; the cellular coat of the vein then becomes thickened, red, and inflamed; and, finally, the changes which have been noticed extend to the lining membrane. The effects of inflammation thus are shown to extend to, and not from, the internal surface of veins. M. Cruveilhier indeed regards the coagulation of blood in a vessel as the effect of inflammation previously existing. But the author has satisfied himself, that if blood be prevented from stagnating in a vein, no change will thereby be produced in its lining membrane. The inflammation is not, therefore, propagated by continuity of surface, as has been generally supposed, but by the stagnation, in different parts, of vitiated blood. Coagulation of the blood would therefore appear to be the cause, and not the effect, of inflammation of veins. This view is further supported by the fact, that simple adhesive in-

flammation of a vein will not produce coagulation of its contents. A preparation was exhibited, showing the effects of a ligature upon a vein twenty-four hours before death. No coagulation of the blood, nor deposit of fibrin on the lining membrane, had in this case taken place. The coats of the vein were thrown into folds, and a white band marked the situation of the ligature; but the projecting folds of the lining membrane presented their natural smooth, polished, and lubricated appearance. Healthy venous blood will remain fluid for days, when confined in a vein by a ligature. In this respect there is a contrast between a vein and an artery. In the latter case, the internal coats are divided, and the blood, coming in contact with the divided edges, immediately coagulates. In the vein, on the contrary, the lining membrane is not divided, and therefore the blood remains in contact only with the natural lining of the vessel. Cases in which a small quantity of pus has been introduced into a vein, afford the strongest contrast to those in which the coats have been mechanically irritated. In the latter case, no coagulum will form, or one only sufficient to unite any lesion there may be of the lining membrane. In the former, on the contrary, extensive fibrinous plugs will occupy the vessels. These will sometimes occupy the whole diameter of the vein, and become firmly attached to its sides; at other times, the outer layers only will become firmly coagulated, and the central ones will remain in a semi-fluid condition. It will sometimes happen, that the central portions will be removed, leaving the outer layers attached to the walls of the vessel. The circulation may then be continued through an adventitious cylinder of fibrin. Cases occasionally occur, in which a delicate velvety layer only is deposited on the lining membrane, which remains unaltered in appearance in other parts. The coagula which form in veins will, under such circumstances, lose, in different situations, much of their colouring matter; and it will be observed that the lining membrane of the vein is coloured (from imbibition) in exact proportion to the amount of colouring matter contained in the different parts of coagula. It will occasionally happen, that portions of the decolorized fibrin will become organized and intimately connected with the sides of the veins, as illustrated in a preparation exhibited to the Society. Such layers of fibrin appear constantly to have been mistaken for lymph, the product of inflammation. The extreme readiness with which the blood coagulates from the contact of purulent matter, affords a most important provision for the security of the general system. It appears to depend upon a faculty with which the blood is endowed for its self-preservation. This faculty, although hitherto unacknowledged by physiologists, doubtless exists, and is comparable to the preservative sensibility with which every other part of a living being is endowed. When purulent fluid is introduced into a vein, if the coagula are firmly formed, a local inflammation will alone ensue; but, if the morbid matter extends along the vessel, a high degree of constitutional irritation will follow, and the symptoms will occasionally bear a striking resemblance to those of typhus fever. In cases as they present themselves in practice, these two sets of symptoms are constantly present at the same time; but they may be produced separately by a very simple experiment: if, for instance, purulent fluid be introduced into a vein, and allowed to remain undisturbed, a local inflammation only will be set up, which will terminate in the formation of an abscess around the vein. The contents of the vein will then become softened, and expelled externally, together with the contents of the abscess. But, if the morbid matter be forced forward, in the course of the circulation, no local inflammation will occur, but the symptoms will indicate either the presence of secondary inflammation in some internal part, or of a general contamination of the blood. If the view taken of the origin of inflammation of the veins be correct, it will be evident, that any treatment, to be effectual, must have reference to the first periods of the disease; and that those remedies will most effectually guard the system against the contamination (so much dreaded in this class of cases) which will favour the sequestration of vitiated blood, and tend to localize the disease. The remedies which have been employed to subdue the local inflammation, appear but too often to have done so at the expense of the general system; for, although the local symptoms have become less prominent, fatal mischief has appeared in other parts. In severe cases, those remedies only can be safely employed which tend to preserve the power of the blood, and especially those which increase its coagulating power, so as to enable it to separate that portion which has become infected from the general circulation. Bark and opium, together with a nutritious diet, are the means which appear to favour these actions, upon the due performance of which the safety of the patient depends; while bleeding and calomel, however useful they may be in a case of simple inflammation of the coats of a vein, appear inadmissible when the disease, as generally happens, originates in its contents.

REMARKS ON HYDROPHOBIA.

By B. E. BRODHURST, Esq., M.R.C.S.

The author observed, that it was to *hydrophobia rabiosa*, or that disease which arose from inoculation with the saliva of a rabid animal, in contradistinction to *hydrophobia simplex*, that he was desirous of directing attention. Hydrophobia was a disease properly of the canine race, and did not arise spontaneously in man; but it was communicable to him from all rabid animals. There was no instance on record of the disease being communicated from man to man, although experiment proved that it could be transmitted from man to animals. There appeared to be a peculiar predisposition in the canine race to this disease. The author was inclined to believe that the disease occasionally arose spontaneously in the dog, although Mr. Youatt had expressed a contrary opinion, to the effect that it was propagated by inoculation alone. The author was led to the opinion opposed to that of Mr. Youatt, by observing that rabies was extremely rare in the south of Europe among the native dogs, but that it was by no means an unfrequent occurrence for an English dog to become rabid when taken to the south. The author considered that diet exercised a marked influence: that if a dog be allowed a diet principally of animal matter during the summer, he would almost certainly die hydrophobic. This applied equally to English and native dogs. Extreme cold and privation, however, also favoured the development of the disease, and seemed to be the most frequent cause of the malady among wolves. The author then proceeded to detail the more prominent symptoms produced on man by the bite of a rabid animal, as well as the periods within which they were usually developed. The wound healed without any peculiar indications, just as a similar bite by a healthy animal would heal; but at some uncertain period, often extending to forty or sixty days, pain was felt in the course of the nerves of the limb, and might be taken as the first positive indication of the approach of hydrophobia. Disturbance of the general health sometimes preceded this stage; the cicatrized wound became a sore. General nervous irritability and other manifestations of cerebral disorder, with mental emotions of fear and unnecessary dread on the approach of persons; hallucinations, spectral illusions, inordinate and disordered sensibility of the skin, with morbid increase of acuteness in the organs of special sense, were among the most characteristic signs of the confirmed disease. The author, who had witnessed three cases of hydrophobia, proceeded to relate the particulars of one which occurred in Vienna to a man 64 years of age, a farrier, who was bitten in the palm. The wound healed, and it was not till the forty-second day from the injury, after a debauch, that the patient awoke feverish, and with an aversion to water. He was removed to the hospital, under Professor Schulz. Various remedies were tried; cantharides, opium, belladonna. Tetanic spasms, of which opisthotonos was the expressive feature, came on. The convulsions continued, and, agitated with emotions of intense fear, he died. The body was examined by Rokitansky. The membranes, as well as the substance of the brain, were congested; the arachnoid opalescent; the bronchial and pulmonary mucous surfaces deeply congested; and the lungs remarkably engorged. The heart was empty, and the blood was fluid in the vessels; the mucous membrane of the kidneys and ureters congested. The bladder was pale, and all the other viscera healthy. The author stated, that the characteristic morbid appearance in the dog was an injected condition of the medulla oblongata and its membranes. But Rokitansky had stated, at the time of the above examination, that of the many cases he had examined, he had never found any appearances in the medulla oblongata which he could connect with the spasm. The author then directed attention to the certainty of the action of the saliva of a rabid animal when once introduced into the blood; not less certain, indeed, than that of a venomous serpent, though the period of its incubation was much longer. Although he admitted that one-third of those bitten might not manifest any symptoms, whereas the bite of a poisonous reptile was immediately followed by palpable effects, yet this immunity might be explained by the virus being wiped from the tooth before it penetrated, in the bite of a dog; while in a serpent the venom only exudes when the mandibular pressure ceases to be made. The author believed, that, as hydrophobia was primarily a blood disease, the presence of another blood disease, such as syphilis or variola, might arrest the hydrophobic poison. He regarded it as proved beyond doubt, that symptoms of hydrophobia had been arrested and suspended by variola; for hydrophobia could only develop itself after another poison, that might have been present at the period of inoculation, should have run its course. He rejected the doctrine, that the rabid poison could lie in a wound, and neither irritate nor be absorbed. It had been stated by writers, that the period of recrudescence was the commencement of the malady, the period of delitescence being overlooked. It was thus supposed, that the poison could lurk in

the wound, and that it was capable of being removed by excision at any time prior to the state of recrudescence. This disease, once developed, appeared necessarily fatal; treatment, therefore, to be effectual, should be vigorous and energetic in the primary or preventive period; and the author conceived, that as, in variola, its course might be retarded, and its intensity modified, by substituting another poison which had a certain affinity for the blood, so might it be hoped, that the hydrophobic poison might be rendered amenable to medical aid through the agency of mineral or animal matter. He mentioned the powerful effects on the blood of arsenic and mercury, and thought that one or other of these remedies, administered *ab initio*, might be productive of happy results. The author referred to the successful cases recorded by Wendt in the Breslau Hospital, where salivation appeared to have been practised with success, and where means were also used to remove the virus locally from the wound. The author, in conclusion, considered that the patient should remain under active treatment, in every case, from forty to sixty days; the influence of the mineral should be rapidly obtained and continued, so that a positive change might be effected in the blood, and the condition which favoured the hydrophobic virus destroyed.

Dr. Webster agreed with the author respecting the greater frequency of hydrophobia in cold than in warm climates. It is much more prevalent in the north of Europe than in Italy or France. In northern Germany, especially in Prussia, as he (Dr. Webster) could assert from his own knowledge, it produced marked ravages, which medical men ascribed to famished wolves from the forests of Poland during severe winters, infecting the village dogs, by whom the malady was afterwards spread. Mr. Brodhurst had alluded to an outbreak of this terrible scourge in Stockholm last winter; and he would add, that, about the beginning of this year, it prevailed like an epidemic in Altona and Hambnrgh, and also in several places in Holstein, and many persons died; cows and horses, especially the latter, were often attacked. Although less common in warm regions, it prevailed at times in them; while he was travelling in Italy some years ago, several fatal cases occurred, one being that of a priest, who had been bitten by a goat. Hydrophobia was very common last February in the lower Loire, among dogs, cats, and cows. This very day the newspapers reported the case of a physician practising at Valence, on the Rhone, who died from hydrophobia early in this month.(a) Contrasted with these statements, indicating considerable prevalence of canine madness on the Continent, it is very satisfactory to find that the disease is now much more rare in London than it used to be, only two fatal cases having occurred since 1846 in the metropolis, whereas sixteen deaths were recorded during the seven previous years. This remarkable immunity, he said, may be attributed to Mr. Fox Maule's Act, interdicting dogs being employed in drawing carts, whereby hydrophobia was said to have been often produced in these animals. Mr. Brodhurst's notion, that the blood became vitiated by the absorption of hydrophobic virus was not altogether new, but his recommendation of mercury, in order to counteract its deleterious influence, appeared more so. For instance, a Polish physician —Dr. Czajewski—read an interesting paper before the medical section of the scientific Congress of France, assembled at Orleans last autumn, in which he advocated somewhat similar views; but the treatment he recommended was very different. He advised copious bleedings every four or five days, until deliquium followed, so that before any serious symptoms supervened, the morbific taint being eliminated from the system, recovery might be more confidently anticipated. Notwithstanding various specifics for this disease have been occasionally brought forward, not one of them has ever stood the test of experience. Dr. Webster said, in conclusion, that having seen three fatal cases of hydrophobia, and believing that every kind of treatment hitherto employed has proved utterly inefficacious, he was inclined to think that the author's proposal of administering mercury in order to neutralise the poison deserved consideration.

Mr. M. Henry inquired the experience of the members of the Society as to the time when the disease developed itself after the reception of the poison? Some of the published cases appeared to be almost incredible.

Dr. James Bird had seen only two cases of the disease, both of them in Bombay. One was a sepoy, a stout, muscular man; the other an English officer. The first was attacked twelve months, the other six weeks, after having been bitten. In the case of the sepoy, the bitten part appeared to be affected with neuritis. There was a little tubercle at the cicatrix, which, when touched, threw the patient into convulsions. Mercury, given to ptyalism, appeared to relieve the violence of the symptoms, but it was used together with enemata of tobacco, so that it was difficult to determine which of the remedies caused the relief of the spasms. He died at the end of six or seven days. The officer died on the third or fourth day.

Dr. Th. Thompson alluded to a case in the practice of the late Mr. Hunter, of Islington,—that of a servant-girl, bitten by a rabid animal. The symptoms of hydrophobia showed themselves a week afterwards. An effect similar to that observed in the sepoy's case was produced by touching the cicatrix, the girl being immediately convulsed. An incision through the skin was made round the cicatrix, and then pressure ceased to cause spasm. The case ended fatally. He thought that this case, and that of Dr. Bird's, were somewhat against the theory, that the disease is dependent upon a morbid condition of the blood. Mr. Youatt placed much reliance on the administration of a mixture of belladonna with scutularis, as a preventive of the disease in dogs, after they had been bitten by a rabid animal. He made an extensive series of experiments with the medicine, and the result convinced him that it had some prophylactic power. With respect to the theory of the disease being dependent upon an altered condition of the blood, he might mention a certain train of symptoms, caused by the bite of a cat not in a rabid state. These consisted in wasting of the muscles, contraction, spasm, and neuralgia. There was sufficient analogy in these two conditions to show an argument against the blood theory.

The President had seen the case of a poor man, some years since, affected with hydrophobia, to whom belladonna was given to a great extent without any benefit. There were one or two points in the paper deserving notice. 1st. Was the disease as invariably fatal in the dog as in man? He had, some years since, made inquiries upon this point among persons likely to be well informed on the matter, and all agreed, that when attacked with hydrophia dogs invariably died. They all died within a fortnight after the accession of the symptoms. This was an important circumstance, because it was considered, that if a person were bitten by a dog supposed to be rabid, the fact that the dog survived the fortnight was regarded as an evidence of the safety of the bitten person. There was another practical point in the paper to which he would allude. He had seen a case some years since, which seemed to show that excision of the bitten part, at any time previous to the accession of the disease, would prevent its occurrence. A rabid dog bit two children, and their father afterwards in the arm. One child was bitten in the leg, the other in the shoulder; all slightly. The child that was bitten second was seized with hydrophobia. After this the father and the other child had the parts excised, and they escaped. This fact was important so far as it went; it would be observed, that the second person bitten died, so that the dog must have been mad when it bit the third. All the inquiries he had made in reference to the effect of incision of the bitten parts, tended to show that it insured the safety of the injured person.

Dr. T. Thompson wished to explain, that in Mr. Youatt's case the belladonna had been given as a prophylactic, and not as a curative remedy. Excision had been practised on two persons bitten at the same as the servant-girl at Islington, and successfully. The servant refused to submit to the slight operation, and died from the disease.

(a) The following is the case alluded to by Dr. Webster:—"Death from Hydrophobia.—Dr. Vanel, a young physician at Livron, remarkable for his talents and amiable disposition, died on the 8th inst. of hydrophobia. Somewhat more than a month back, a young puppy, which he was bringing up, bit him in the thumb of the left hand. As the mother of this dog had died mad, M. Vanel immediately applied caustic to the wound. The same puppy afterwards bit some other persons, and soon after died. M. Vanel then applied a red-hot iron to his wound, and no ill effects occurred. All his friends felt assured that nothing was to be apprehended, but the doctor himself grew melancholy, and always maintained that hydrophobia would certainly supervene. On the night of the 9th inst. his prediction was verified, as he was seized with violent agitation and fever, accompanied from time to time with convulsive symptoms. M. Mondan, the communal teacher, sat up with him the next night, and every attention was paid him, at first by Drs. Salette and Accarte, and afterwards by them conjointly with MM. Lherminier, senior and junior, physicians. 'My limbs,' said the patient, 'are all one mass of agony, but my mind remains intact. Do not fear me,' he added to those around him, 'I will not bite any one, for I have never been of a cruel disposition.' Every effort which he made to drink produced convulsions, and, after great suffering, he at last expired, retaining his intelligence to the last. He leaves behind him a young wife, about to give birth to a child, and a mother and sister, by whom he was much beloved. His loss will be deeply felt by the poor around.

STATISTICAL SOCIETY OF LONDON.

Lieut.-Col. W. H. Sykes, Vice-President, in the Chair.

MORTALITY AMONG MEDICAL MEN.

The first paper read to the meeting was one by Mr. Neison, the actuary to the Medical Invalid Life Office, on the rate of mortality among two different classes of medical men,—one class being the officers of the medical department of the Royal army, and the other class the members of the Royal Medical and Chirurgical Society. The facts relating to the former, Class I., had been taken from the records of the Society for the benefit of the widows of the

officers of the medical department of the Royal army, established in 1816; while the facts relating to the latter, Class II., were abstracted from the books of the Royal Medical and Chirurgical Society, instituted in the year 1805. Mr. Neison exhibited to the members of the Society a number of elaborate tables of the rate of mortality among the two classes of medical men referred to, as compared with that for Class III., the officers of the Bengal army, and Class IV., the male population of England and Wales generally. After stating that the various facts had been analysed with the utmost care, Mr. Neison commenced with explanatory observations upon the tables, and pointed out the influence of matrimony upon the duration of life in Class I., or the medical officers of the Royal army. It appeared that those of all ages of Class I. and earlier, who entered the Society unmarried, had been subjected to 14·665 years' risk, and the actual number of deaths had been 386, or 2·632 per cent.; while the rate of mortality for the like ages in Class IV., or the male population of England and Wales generally, was only 1·888 per cent. The irregularity in the mortality at particular ages was exceedingly curious; but it is impossible, in a short notice like the present, to give more than a general idea of the final results. The mortality in Class I. for the younger ages, 20 to 34, was shown to be exceedingly high; while, for the advanced ages, 55 to 84, it was found to be remarkably low. It appeared from another table, that those of all ages, of Class I., who entered the Society in the married state, had been subjected to 4·284,—five years' risk,—and there had been 120 deaths, giving a mortality per cent. of 2·801. Irregularities at particular ages were found to prevail among this class of members also, but not to so great an extent as among the unmarried members. The rate of mortality among all members of Class I., or those who entered the Society, whether married or unmarried, from its establishment to the 1st of January, 1851, for all ages from 25 to 84, was found to be 2·537 per cent.; while that for Class IV. was only 1·918 per cent. Other tables went minutely into detail as to the existing mortality of the single and married members of Class I. An after part of Mr. Neison's paper treats of the mortality of Class II., the members of the Royal Medical and Chirurgical Society, and also gives a chirurgical view of the Society from its commencement. A very complete table gave the rate of mortality among the members of the above Society for each quinquennial period of life from 26 to 70, and brought into comparison the similar results for Class IV. For the total ages, 26 to 70, there had been 7·834 years' risk, and 96 deaths, giving a mortality per cent. of 1·225; while the rate of mortality in Class IV. for the same ages was 1·239 per cent.; and the number of deaths that would have happened, according to this rate, would have been 97; from which it appears, that the rates of mortality in Class II. and IV. were almost identical.

At the conclusion of the paper, a discussion arose as to the causes of the irregularities mentioned in the mortality of Class I.

The paper is an exceedingly interesting one, worked up with great care and labour, and will appear in due time in the journal of the Statistical Society.

Colonel Sykes then read a paper on the

SICKNESS AND MORTALITY OF THE TROOPS (EUROPEAN AND NATIVE), UNDER THE GOVERNMENT OF BOMBAY,

for the year 1848 and 1849, during which the average of deaths to strength was, European 2·263 per cent., and native 0·933. This return, with the exception of that for the year 1832, is the most satisfactory upon record of the health of the Bombay Army, European and native, particularly in relation to the European portion of it. At some of the stations the mortality was less than it usually is within the United Kingdom. The heavy mortality of 5¼ per cent. among the European troops at Bombay, Colonel Sykes thought, might be partly owing to defective barrack ventilation, and to the nature of the soil upon which the barracks are built, but chiefly to intemperance. The mean annual deaths of the Europeans of the Bombay Army for 20 years, 1825 to 1844, was only 5·078 per cent., inclusive of losses from cholera, or ½ per cent. less than the loss in Bombay in the years 1848-9. Colonel Sykes concluded his valuable paper, which will be published in the journal of the Society, by drawing the attention of Insurance Companies in England to the fact of the native troops losing less than 1 in 100 per annum, and to the probable pecuniary advantages which would result from the establishment of insurance offices in India for the insurance of native lives, particularly the native public servants. Colonel Sykes finally exhibited to the meeting a very able historical and statistical chart of the progress of British commerce, from the Norman Conquest to the present time, by Mr. Bashly Britten; comprising also, for later times, public expenditure, prices of corn, rates of wages, etc. etc.

PARIS ACADEMY OF SCIENCES.

ON THE INFLUENCE OF THE GRAND SYMPATHETIC NERVOUS SYSTEM ON ANIMAL HEAT.

By M. CLAUDE BERNARD.

Researches have been for a long time conducted by different experimentalists, with the object of ascertaining the influence which the nervous system exercises on the temperature of the bodies of warm-blooded animals. From these researches we learn, that lesions of the nervous organs, cerebro-vertebral, constantly produce either a total or partial diminution of temperature according to whether we divide only the nerves which pass through a limited portion of the body, or operate upon the nervous centres themselves. M. Bernard has proved, from the researches which form the subject of his present communication, that, in acting on the ganglionary nervous system of the grand sympathetic, an inverse phenomenon is produced; that is to say, a very rapid elevation of temperature, capable of being readily ascertained. As yet, he has only been enabled to determine this elevation of temperature in a partial degree,—that is, in one member of a body, such as the face, etc. The following is one of his experiments relative to the head:—

When, in a mammiferous animal,—as, for instance, a dog, a horse, a cat, or a rabbit,—we cut the nervous filament in the middle of the neck, which serves as a communication between the inferior cervical ganglion and the superior cervical ganglion, or remove the cervical ganglion itself, an increase of heat through the whole corresponding side of the head of the animal takes place. This elevation of temperature occurs instantaneously, and developes itself so quickly, that in a few minutes, under certain circumstances, a difference of temperature, sometimes as much as three or four degrees, is found between one side of the head and the other. This difference in heat is readily ascertained by the hand, but is more conveniently determined by introducing comparative thermometers into the nostrils or ears of the animals. This difference of three or four degrees of temperature between the two sides of the face is remarkable; but if we then compare the heat of the ear and the nostril (thus increases by the section of the nerve) with the heat of the rectum or central parts of the body, the thorax or the abdomen, it is found to be nearly the same. M. Bernard has, however, sometimes found that the section of the filament of the cervical sympathetic nerve in the rabbit, produces an increase of heat in the corresponding ear to 40° centigrade, while the normal temperature in the rectum in that animal does not generally exceed 38° or 39°.

M. Bernard announced that this communication is but the prelude of a series of investigations to which he proposes to call the attention of the Academy. At present, he confines himself to noticing the above experiment, which proves that a very different influence is exercised on animal heat when the nerves of the grand sympathetic are acted upon instead of the nerves of the spinal marrow.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 6, 1852:—

Blomfield, Andrew Muskett, Barton. Norfolk.
Crosby, Thomas Boor, Gasberton, Lincolnshire.
Gabriel, Alfred Edmund, Collumpton, Devon.
Hernage, Henry James, Nottingham.
Johnson, William Alfred, Warwickshire.
Kirby, Christopher, Halifax, York.
Masfen, William Edward, Stafford.
Ogden, Robert Thomas, Rochdale, Lancashire.
Saville, William, Wakefield, York.
Taunton, George, Oxford.

Obituary.—On the 26th of April, at Liverpool, John Hughes, Esq., surgeon, aged 44. On the same day, at Maddox-street, Bond-street, John Geo. Porter, jun., Esq, surgeon, late of Peterborough. On the 4th of January, at Paramatta, New South Wales, Bute Stuart, M.D., youngest son of the late James Stuart, Esq., Blairhall, M.B. On November 25, of consumption, at sea, James E. Partington, Esq., surgeon of the Lord Stanley, merchantman. On the 1st inst., — Day, Esq., surgeon, of Harlow, Essex. He was found lying lifeless in his garden. On the 26th ult., in Maddox-street, Matthew Scott Moore, M.D., formerly Superintending Surgeon of the Madras establishment. On the 6th instant, at his residence, Claremont-house, Cheltenham, Thomas R. Exham, M.D., aged 32. On the 5th instant, at his father's house, Brentwood, in

the 33rd year of his age, Thomas Shuttleworth Butler, Esq., M.R.C.S., Assistant-Surgeon in the H.E.I.C.S., Bombay.

Medical Appointments and Vacancies.—An assistant medical officer is wanted for the Lincolnshire Lunatic Asylum. Salary 50*l.* a-year, with residence, board, washing, etc., in the asylum. Candidates must possess the double qualification. Date of election May 20th. Mr. Hartwell has been elected surgeon to the Exeter Dispensary, his three opponents having retired; Mr. Amory, the retiring surgeon, has also been elected consulting surgeon to the Dispensary.

Military Appointments.—6th regiment of Foot, Assistant-surgeon Egerton James Pratt, from the 62d Foot, to be surgeon, vice John Murtagh, M.D., who retires upon half-pay. 10th Foot, acting-assistant-surgeon, Duncan Robertson Rennie, to be assistant-surgeon, vice Inglis, promoted in the 64th Foot. 62d Foot, Cornelius Clark Rutherford, gent., to be assistant-surgeon, vice Pratt, promoted in the 6th Foot. Hospital Staff acting assistant-surgeon, James Joseph Roosemalecocy, to be assistant-surgeon to the Forces, vice Jamesou, appointed to the 87th Foot.

Naval Appointments.—Surgeon John P. Burke, M.D. (1845), Assistant-surgeon William E. Hambly (1847), to the Buzzard.

Militia Appointments.—Commission signed by the Lord-Lieutenant of the County of Middlesex, Royal East Middlesex regiment of Militia, Francis Dalton, gent., to be surgeon. Commission signed by the Lord-Lieutenant of the County of Lancaster, Lanarkshire Regiment of Yeomanry Cavalry: Robert Logan, to be surgeon.

King's College Medical School. — The following was omitted in our last:—Scholars of 1852.—Senior scholar (3rd year), Macnamara, F. N.; 2nd year's scholar, Dowson, Edward; junior scholars (1st year), Buzzard, Thomas; Macnamara, C. N.; Bird, F.

St. George's Hospital School of Anatomy and Medicine. —In the award of prizes at this Institution, Mr. A. T. H. Waters received the *prize* in Clinical Medicine, and not the certificate, as erroneously stated in our last. The same gentleman also received Dr. Sibson's clinical prize.

Hospital for Sick Children, Great Ormond Street. —Her Majesty has graciously consented to become the patroness of this Institution, and has presented to its funds a donation of 100 guineas.

Infirmary for Asthma and Consumption.—The anniversary dinner was held on the 7th inst., the Earl of Shaftesbury presiding. It was stated, that upwards of 39,000 persons had been relieved since the establishment of the Infirmary in 1814, and that several wards had been opened recently. The out-patients during the past year amounted to 1700; the income being 775*l.* 19s. 9d., of which a balance of only 8*l.* 17s. was left.

Brompton Hospital for Consumption and Diseases of the Chest.—A festival in commemoration of the commencement of the east wing of this hospital was held lately at the Albion Tavern, His Royal Highness the Duke of Cambridge presiding. The Report stated, that the number of in-door patients was 474, of whom 316 had been discharged cured or greatly benefited, 68 died, and 90 were still under treatment. The number of out-patients during the year was 3199, being an increase of 136. The proposed new wing, it was stated, would give accommodation for 230 patients, and there are already 133 applicants for admission. The subscriptions during the evening amounted to 3318*l.*

Charity for Hospital Purposes.—Mr. Vyner has presented 50*l.* to the Free Cancer Hospital; the list of donations just published by the Committee amounts to upwards of 130*l.* The late Lord Panmure has bequeathed 1000*l.* to the Dundee Royal Infirmary, 300*l.* to the Dundee Lunatic Asylum, 500*l.* to the Montrose Natural History and Antiquarian Society, 1000*l.* to the Arbroath Infirmary, and 100*l.* to the Arbroath Destitute Sick Society. We are glad to record a new list of donations for the hospital for Sick Children, amounting to upwards of 300*l.* Among the donors we find the names of Lord Alvanley (21*l.*), Mrs. Best (10*l.*), Mr. Brett (31*l.* 10s.), Lord Calthorpe (10*l.*), Duke of Cleveland (20*l.*), Mr. Greene (21*l.*), Mr. Holford (50*l.*), Mr. Mills (21*l.*), Admiral Percy (31*l.* 10s.), Mr. Sheridan, M.P., (31*l.* 10s.), and Mr. Young (10*l.* 10s.) At the anniversary dinner for the Brompton Hospital for Diseases of the Chest, upwards of 3300*l.* were subscribed in its behalf. The Treasurer of the Royal Orthopædic Hospital, in Bloomsbury Square, has just received 500*l.*, being a bequest to the funds of the Institution, made by the late Mr. Mackenzie. He has also bequeathed 500*l.* to the Middlesex Hospital; 500*l.* to the Charing Cross Hospital; 300*l.* to the Marylebone General Dispensary, Welbeck-street; and 300*l.* to the Marylebone Provident Dispensary, Charlotte-street, Portland-place.

Medical Benevolent College.—The munificent gift of 100*l.* has just been presented to the Medical Benevolent College by Dr. Leslie, as one of the executors under the will of the late Mrs. Dunlop. Dr. Leslie has acted nobly in thus recognising the claims of this excellent Institution.

London Hospital Medical School.—The annual distribution of prizes took place on Tuesday, May 11th; William Cotton, Esq, D.C.L., Vice-President of the hospital, in the chair. The hospital gold medals awarded by the governors for zeal and intelligence in attendance on the patients in the wards. Medical.—Frederick Hall, Lincoln. Surgical.—Alfred Adams Mantell, Bitton. Medicine, senior class.—Gold medal, F. Hall; honorary certificate, Harry May, The Potteries, junior class.—Silver medal, Robert Walker Jenkins, London; honorary certificate, Joseph Porter, Rotherhithe. Surgery, senior class.—Gold medal, R. W. Jenkins; honorary certificate, F. Hall. Junior class.—Silver medal, Samuel Pratt Woodfall, Footscray. Anatomy and Physiology, senior class.—Gold medal, Horace Kersey Debenham; honorary certificate, John Charles Robertson, Purbrook. Junior class.—Silver medal, James Edger Edmunds, Burnham. Midwifery.—Gold medal, Robert Brudenell Carter, Leytonstone; honorary certificate, J. C. Robertson. Chemistry.—Silver medal, Alfred Phipos, Dalston; honorary certificate, Alexander Robert Kilroy, Plymouth. Materia Medica.—Silver medal, R. W. Jenkins; honorary certificate, H. K. Debenham. Forensic Medicine.—Silver medal, R. W. Jenkins; honorary certificate, William Henry Carter, Billericay. Botany.—Silver medal, R. W. Jenkins; honorary certificate, H. K. Debenham.

Queen's Hospital, Birmingham.—At the weekly Board of Queen's Hospital, held on Friday last, the Rev. Prebendary Gray in the chair; present, J. E. Piercy, Esq., Messrs. D. Barnett, G. Taylor, E. T. Cox, J. Griffin, M. Banks, J. Suckling, J. Watson, and T. Boucher,—the election of Dr. Heslop as Physician was ordered to be entered on the Minutes. The Vice-Principal instructed the Dean of the Faculty to forward the Report of Dr. Heslop's appointment to the Committee of Council of the Queen's Hospital; the appointment to be submitted to the Board of Governors of that Charity for confirmation at their next annual meeting.

University of St. Andrew's.—List of gentlemen who had the degree of Doctor of Medicine conferred upon them, May 7, 1852: — Francis Ayrton, M.R.C.S., and L.A.C., Liverpool; William Burns Beatson, M.R.C.S., and L.A.C., Peckham, Surrey, H.E.I.C.S., Bengal; James Strange Biggs, M.R.C.S., and L.A.C., Devizes, Wilts.; Charles Blatherwick, M.R.C.S., Titchfield, Hampshire, E.; James Boyd, L.F.P. and S., Glasgow, Beith, Ayrshire; Richard Cross, M.R.C.S., and L.A.C., Scarborough; Robert Butterfield Cumming, M.R.C.S., London; James Drummond, M.R.C.S. Ed., Edinburgh; David Duncan, M.R.C.S. Ed., Glasgow; Edward O'Callaghan Foott, M.R.C.S., Cork, Ireland; Benjamin Godfrey, L.A.C., Romsey, Hampshire; Edmund Grosvenor Goulden, M.R.C.S., and L.A.C., Hazel-grove, Cheshire; John Graham, F.R.C.S., and L.A.C., Essex; Horace Edward Philogonius Johnson, L.A.C., London; William Locke, M.R.C.S., and L.A.C., Hoddesdon, Herts; Charles Martin, M.R.C.S. Ed., Leicester; Samuel Mault, M.R.C.S. Ed., Nagercoil, South Travancore, E. Indies; James M'Cann, M.R.C.S., and L.A.C., London; Richard Budd Painter, M.R.C.S., and L.A.C., London; George Newport Pickstock, M.R.C.S., Belize, Honduras, W. Indies; John James Ridge, M.R.C.S., and L.A.C., Gravesend, Kent; Francis Salter, M.R.C.S., and L.A.C., Hayes, Middlesex; Samuel Stacy Skipton, London; Thomas James Vallance, M.R.C.S., and L.A.C., Stratford-house, Essex; Watkin Saudom Whylock, M.R.C.S., Southwark; William White Williams, M.R.C.P. L., and M.R.C.S., Gloucester; John Wills, M.R.C.S., Wiltshire. Mr. Benjamin Thomas Moore passed the requisite examinations, but, in consequence of an informality in his certificates, his degree was temporarily deferred.

Dr. Thomas Leigh Blundell has removed from Finsbury-place South, to No. 29, New Broad-street, late Dr. Frampton's.

National Ingratitude.—It is well known to many of our readers, that for several years past Mr. George Alfred Walker, a member of the Profession, has exerted himself most manfully, and without any assistance whatever, in an endeavour to abolish the disgusting plan of inhuming the dead in the midst of the living. So strenuously has he worked, that at last the Government were induced to bring forward a Metropolitan Interment Act, and it would be supposed, naturally enough, that they, the Government authorities, would immediately avail themselves of the great and valuable experience of Mr. Walker to assist them in carrying out the object first propounded by this gentleman. Not so, for they immediately gave the good things to other gentlemen, as will be seen by a Parliamentary Return, printed last Monday, showing

that, under this Metropolitan Interment Act, Dr. Southwood Smith had been paid a salary of 1,200*l.* a-year; Mr. C. Macaulay, secretary, 500*l.*; Mr. H. R. Williams, treasurer, 600*l.* (since the 8th of August last the office has been vacant); and to Mr. H. C. Edwards, clerk, 150*l.* *Palmam qui meruit ferat* must cease to be a household sentence after this treatment of Mr. Walker.

By the news from the Cape we learn, that the body of Dr. Laing, Staff-Surgeon, drowned in the wreck of the Birkenhead, has been washed ashore, with forty-eight other bodies.

On the 7th inst., Petitions were presented to the House of Commons from the Graduates of the University of London, praying that they might send representatives to Parliament.

Gutta Percha in Diseases of the Skin.—Dr. Graves, of Dublin, has used, since last November, a saturated solution of gutta percha in chloroform, as a topical application in various diseases of the skin. The success of this novel remedy has been very remarkable. Dr. Graves has written a paper on the subject, which will appear in the next number of the *Dublin Quarterly Journal of Medical Science.*

Mortality Notabilia.—In the week that ended Saturday, May 8, the number of deaths registered in the metropolitan districts was 972. In the ten corresponding weeks of 1842-51 the average number of deaths was 898, which, if raised in proportion to increase of population, becomes 988. The rate of mortality now prevailing, therefore, differs little from the average amount. The gradual decline of mortality which at this season accompanies an increasing temperature is shown as follows:—In the third week of March the deaths rose to 1208; in the second week of April they fell to 1051; and in the first week of May, to 972. The mean weekly temperatures that marked these several periods were 40·5°, 42·0°, and 48·1°. Of the 972 persons enumerated in the present Return, 498 were males and 474 females; 451 died under 15 years of age, 339 at 15 years and under 60, and 176 at 60 years and upwards. As compared with the results of the previous week, there is a decrease, both in the deaths caused by epidemics taken altogether, and those by diseases of the respiratory organs, the former having declined from 232 to 193, the latter from 187 to 166. Small-pox, to judge from its weekly mortality, seems to prevail in London to about the same extent that it has now done for a lengthened period. In the first week of the present year the deaths registered from this disease were 33; last week they were 31; and in the 17 weeks that intervened, the lowest number was 22, and occurred in March, and the highest, which occurred in January, was 43. The total number of cases in which small-pox has been fatal during the 19 weeks is 591, and the average of a week is 31. In the first week of the year scarlatina was fatal in 41 cases, it declined to 18 in the second week of March, and last week the number was 37; typhus carried off 50 persons in the first week of the year, it declined to 32 in the third week of March, rose to 47 in the third week of April, and last week the number was 33.

DEATHS *in the Metropolis for the week ending Saturday, May 8, 1852.*

Causes of Death.	May 8.				Sum of Ten Weeks.
	0	15	60	All Ages.	
All Causes	451	339	176	972	8980
Specified Causes	445	339	175	959	8925
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	147	38	8	193	1735
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	4	25	19	48	451
3. Tubercular Diseases	73	112	5	190	1875
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	55	34	19	108	1134
5. Diseases of the Heart and Blood-vessels	4	21	12	37	345
6. Diseases of the Lungs and of the other Organs of Respiration ...	72	41	53	166	1364
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	25	25	10	60	590
8. Diseases of the Kidneys, &c. ...	...	10	8	18	86
9. Childbirth, Diseases of the Uterus	...	17	...	17	119
10. Rheumatism, Diseases of the Bones, Joints, &c.	1	4	4	9	89
11. Diseases of the Skin, Cellular Tissue, &c.	...	2	...	2	10
12. Malformations	3	...	...	3	27
13. Premature Birth and Debility ...	25	1	...	26	205
14. Atrophy	25	1	1	27	179
15. Age	...	...	32	32	419
16. Sudden	7	2	...	9	82
17. Violence, Privation, Cold, and Intemperance	4	6	4	14	194
Causes not Specified	6	...	1	7	55

TO CORRESPONDENTS.

We have to intimate that, in future, all Communications for this Journal must be authenticated; gentlemen, therefore, who address us must favour us with their names,—certainly not for publication, but that we may be satisfied of their good faith. Henceforth, then, it is to be understood, that, when a letter is unnoticed, it is because the writer's card did not accompany it.

Gentlemen desiring personally to communicate with the Editor, on the business of the Journal, will find him during the Summer Months, on Tuesdays, Wednesdays, and Thursdays, between the hours of 12 and 2, at the Office, 46, Princes-street, Soho.

It is again requested that communications shall not be otherwise addressed than

To the Editor,
"Medical Times and Gazette" Office,
46, Princes-street, Soho,
London.

Mr. Pascoe's Case.—Having intimated, that our correspondence on this subject was closed, we must decline inserting several letters we have again received. The matter has already been most thoroughly investigated, and is quite exhausted. Doubtless, Mr. Pascoe will receive the Royal pardon.

[To the Editor of the Medical Times and Gazette.]

Sir,—In reference to a case of Dislocation of the Sternal End of the Clavicle backwards, which I published in a recent Number of your Journal, I find in your last week's Number a letter from a "St. George's Student," in which he endeavours to explain the occurrence of dislocation in place of fracture, by bringing forward proofs of the extraordinary strength of the clavicle. Now, however strong *experiments* may prove that bone to be, *experience* teaches us, that, of all bones in the body, this is the one most frequently broken; we know, moreover, that this accident often arises from direct violence. Your Correspondent's explanation, therefore, does not tell us why, in this case, dislocation took place instead of fracture.

I am, &c.,

Middlesex Hospital. Septimus W. Sibley.

We have to acknowledge the receipt of several authenticated letters from Edinburgh on the "mattress affair." We are obliged by the communications, but, for obvious reasons, do not publish the names of the writers. Our Correspondents will observe, that we have not as yet availed ourselves of a tithe of their information.

E. A. W. wishes to know "who is the first person recorded to have made any effort to instruct the deaf and dumb."

Mr. Lowe's paper on the excision of the os calcis will shortly appear.

M.D., and an Admirer of Religious Freedom, must, in accordance with rule, favour us with his name. When authenticated we will publish his letter.

Dr. Esdoile will be written to.

Allopath will be considered.

Mr. Bransby Cooper's proofs were not returned in time for this week's publication. We are delighted to accommodate gentlemen who desire to receive proofs, for their personal correction, of communications; but they must return them to the Office not later than Wednesday morning, if intended for the week's publication.

In reply to several Correspondents, we have to state, that our articles "Look at Home," *will* be continued. The disgraceful and unnatural union between the surgeon and chemist,—where the former sees patients gratuitously in the back shop of the latter,—will meet our early consideration.

A Friend.—We will endeavour to comply with the request.

COMMUNICATIONS have been received from—

Dr. Turnbull, of Liverpool; Mr. Jeanneret, of the Finchley-road; Dr. Esdaile, of Perth; Dr. Higgins, of Birkenhead—On the Uterine Sound; Mr. Saunders, of H.M. 47th Regiment; Mr. John Beale, of the Harrow-road; Dr. Monro, of Bethlem Hospital, and Harley-street; An Indignant Extra-Licentiate—On the Injustice of the Money Payments under the Proposed New Charter of the College of Physicians; A Jealous Quadragenarian—On the Electoral Privileges (?) under the New Charter of the College of Physicians; Dr. Roe, of Plymouth—On Uterine Diseases and their Treatment; Dr. Wright, of the West Yorkshire Lunatic Asylum—On Cholera in Asylums; Mr. Williams, of Truro; Mr. Grainger, of Highgate—On the Claims of the Medical Benevolent College; Mr. Ludlow, of Paternoster-row—Hospital Report; Mr. Dendy, of St. James's-park; Mr. Sankey, of Beckley, Sussex; Mr. Hunter, of Moffat, Dumfries-shire—Statistics of the Recruiting Service; G. A. W.; Dr. Dundas, of Liverpool; Allopath; Mr. Sibley, of the Middlesex Hospital; A Friend; Mr. Pretty, of Mornington-road; Mr. Hutton, of the Newcastle Infirmary; Mr. Lowes, of Gosport; Mr. Bottomley, of Croydon; Mr. Brodhurst, of the Royal Orthopædic Hospital, and Brook-street; A Country Subscriber; X. Y. Z.; Mr. [illegible]; Mr. Gibb, of the Newcastle Infirmary.

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LECTURE IN CLINICAL SURGERY.

AT

Guy's Hospital.

By BRANSBY B. COOPER, Esq., F.R.S.,

Senior Surgeon to, and Lecturer on Surgery at, Guy's Hospital.

[Continued from page 384.]

HYDROCELE.

The conditions I have now described are not invariably concomitant; consequently, it is not always easy to distinguish hydrocele from certain other lesions connected with the scrotum, nor even indeed to ascertain the nature of the varieties and complications in which hydrocele itself may be implicated. After what I have said about the simple nature of hydrocele, it may seem an incongruity to admit, that more mistakes and accidents occur in its diagnosis and in the comparatively trifling operation of tapping, than in any other cases in surgery; such is, nevertheless, the fact; but it must depend upon want of proper care, owing to the apparent simplicity of the operation, rather than upon any positive difficulty in the steps of the operation itself.

A hydrocele may be mistaken for a hernia, diseased testicle, varicocele, or hæmatocele; or it may, in fact, be combined with any of these diseases,—a circumstance which would tend greatly to increase the difficulties of the case, both with respect to diagnosis and treatment. In addition to this, hydrocele itself is subject to varieties; it may be congenital, encysted, or diffused; the fluid may be contained in the whole cavity of the tunica vaginalis, as in the last case, or the latter may be divided, in consequence of adhesive inflammation, into two or more distinct cavities, each containing fluid, the whole constituting what is termed a multiform hydrocele.

The collection of serum may likewise not only be situated in the scrotum, but in the inguinal canal; or it may form a small tumour just below the external ring, between it and the testicle, varying, in this respect, from the common form of the disease. The knowledge that these modifications exist, is sufficient to show the necessity for a careful examination into all the circumstances, both constitutional and physical, attendant upon the formation of a tumour in the scrotum, before the diagnosis can be confidently formed, or appropriate treatment adopted. One of the most frequent deviations from the ordinary conditions of a hydrocele is absence of transparency, a peculiarity which tends, perhaps, more than any other, to render the diagnosis obscure and uncertain; while, in its presence, scarcely any other sign of hydrocele need be sought for, the transparency of the tumour being in itself a sufficient proof that it can contain nothing more than a translucent fluid. The fact of the tumour being transparent, although conclusive as to the disease being hydrocele, does not still, however, prove that the hydrocele is not complicated with some other disease; the surgeon must therefore examine closely into this point, and must likewise make himself acquainted with the peculiar character of the hydrocele itself. In the case I quoted at the commencement, the transparency of the tumour was evident at the first examination; but, as I have already said, this diagnostic mark is often either entirely absent, or at least very obscure. The circumstances which may interfere with the transparency of a hydrocele, are thickening of the skin, œdema of the cellular membrane, hypertrophy of the dartos and of the cremaster muscle, thickening of the tunica vaginalis, and opacity of the secreted fluid. I have seen several cases in which, owing to different circumstances, transparency was quite absent from the tumour. Any cutaneous disease in the scrotum may destroy the diaphanous condition of the skin of this part, and obscure the transparency of a hydrocele; but in that case, the appearance of the part externally would account for the loss of transparency; and if the other symptoms of the disease were present, the condition of the skin of the scrotum would scarcely produce much difficulty in forming a just diagnosis. Œdema of the cellular membrane may prove very difficult to distinguish from hydrocele, for in its general appearance the scrotum would then closely resemble hydrocele, with the single exception of wanting transparency. Upon a close examination of the case, it will, however, be found, that the patient manifests a general anasarca, that the tumour *pits* upon pressure, instead of being elastic, and that generally both sides of the scrotum are affected at the same time. I once had a private case in which there was even a distinct amount of transparency in the scrotal tumour; I therefore punctured it with the trocar; but a few drops only of serum exuded, and I found that I had been so far deceived by the transparency as to puncture an œdematous scrotum, in the belief that it was hydrocele. In this case I made small punctures in different parts of the scrotum, serum exuded, and the patient recovered from the disease. I have seen several cases of this kind, and in some of them the swelling had extended up one or both cords. Such cases should be first treated by puncture, to evacuate the fluid, and afterwards by constitutional remedies, to combat the anasarcous tendency. Hernia and hydrocele may be concomitant with each other; the latter being the consequence of some morbid change produced in the tunica vaginalis by the influence of the protruding intestine,—hypertrophy of the dartos and cremaster muscle often accompanying this complication,—so that the transmission of light through the structures covering the tumours is entirely prevented.

In 1810, Mr. Salt, of Dunmow, sent me a gentleman who had a hernia, and who consequently always wore a truss; in spite of this a tumour formed in the scrotum, and this, naturally enough, was looked upon by the patient as caused by his rupture. Upon examining the swelling, I found it perfectly isolated from the abdomen. I tried it by light in the usual way, but could discover no transparency. I, therefore, thought it right to explore the swelling. This I did by cutting down to the tunica vaginalis; and at the time I did this I was under the impression that the swelling was a hæmatocele, which might have been caused by the pressure of the truss. When I exposed the cremaster muscle, I found it, as well as the dartos, much thickened. Upon dividing the cremaster, I exposed the tunica vaginalis, and I perceived at once that this was distended with fluid. I laid it open, evacuated a quantity of the fluid usually found in a hydrocele,—performing what is called the operation by *incision*. The patient perfectly recovered.

In cases of difficulty, requiring exploration, I believe the mode of operating just described to be safer than any other, but it does not always produce a radical cure. In operating for hernia, I have frequently found a hydrocele of the tunica vaginalis connected with it, especially when the hernia has been congenital.

A common cause of absence of transparency in a hydrocele is thickening of the tunica vaginalis itself. In such cases, it must obviously be impossible to tell by mere examination whether the want of transparency proceed from thickening of the tumour, or from some alteration in the character of the fluid within the tumour. If (with the exception of transparency) every other indication of hydrocele be present, there can be no reason why we should not in these cases proceed at once to tap the tumour with a trocar; but if there be other circumstances to complicate the case, we ought to proceed by exploration, as I have just described. I had a patient in Phillip Ward, Guy's Hospital, who had a tumour of the scrotum which presented all the appearances of hydrocele; it had existed for twelve months; and he stated, that during its growth it had given him no inconvenience beyond that which arose from its weight; fluctuation was indistinct in this case, there was total want of transparency, and the weight of the tumour was unusually great in proportion to its size. I determined to evacuate the contents of the tumour by incision; I therefore proceeded cautiously to cut down upon the tunica vaginalis; I found it extremely thickened, highly vascular, and presenting altogether a very unnatural appearance; the evacuated fluid was like coffee-grounds. The patient stated, that he had struck the tumour about three months before, and that from that time its weight had much increased; probably it was then that the blood was effused, which gave to the fluid its peculiar colour and appearance. I have had other cases in which I found the tunica vaginalis very much thickened, particularly when an operation had been performed previously. Only a few days ago, I operated a second time upon the hydrocele of a gentleman, and, according to my invariable practice, examined the tumour before operating, to ascertain if the transparency were present; it was now, however, quite opaque, although it was transparent at the time of the first operation, all the other signs of hydrocele being present. I nevertheless proceeded

to tap the tumour. I now found the tunica vaginalis so thickened as to offer considerable resistance to the entrance of the trocar; but the fluid was precisely similar to that usually secreted in this disease, and to what I had drawn off in the first operation. In a case which I admitted, some time ago, into the hospital, there existed a large swelling in the scrotum, which I could not distinguish with certainty to be a hydrocele; I therefore opened the tunica vaginalis by incision, and let out a quantity of brownish fluid. The tunic itself was very much thickened, cartilaginous in many places, and at its upper part quite ossified.

Mr. Cock had a somewhat similar case, in which the tunic had become quite cartilaginous, and was thrown off by sloughing, after an incision had been made into it. Ossification of the tunic is not unfrequent; this would, of course, necessarily destroy the transparency in hydrocele; probably, wherever the formation of cartilage has commenced in the tunic, ossification would ultimately ensue. There is scarcely an hospital museum in London which does not contain numerous specimens of these peculiar conditions of the tunica vaginalis; that of the College of Surgeons is particularly rich in them.

The contents of common hydrocele are subject to changes which may entirely destroy the transparency of the fluid, and would, of course, tend as much to render the tumour itself opaque as any changes in its tissues could do. Ordinarily, this fluid is of a yellowish or straw colour, quite transparent, having a specific gravity of about 1020, which is rather less than that of the serum of the blood; it coagulates by heat, and by the addition of mineral acids, but less firmly than blood serum, in consequence of its containing less albumen; it contains also the saline matters of the serum. The quantity of fluid present in a hydrocele may vary from an ounce to several pints; I think six ounces may be taken as the average quantity.

Sometimes this fluid is quite turbid, and of a milky whiteness, resembling, indeed, a mixture of milk and serum: in acute cases, following external injury, the fluid will often be found of a reddish hue, or even as dark as coffee, according to the quantity of blood it contains. A large quantity of cholesterine is sometimes found in the fluid of a hydrocele; this substance presents a crystalline appearance upon the surface of the fluid after it has cooled; if this be skimmed off, it will be found to dissolve in boiling alcohol, from which it again separates in the crystalline form of large flat plates on cooling; these are insoluble in caustic potassa. Flakes of fibrin, portions of amorphous coagulated albumen, fatty matter, and even small cartilaginous bodies, are sometimes detected in the fluid of common hydrocele. When extraneous substances are found in the fluid, it is usual for the tunica vaginalis itself to have undergone some of the morbid changes I have already described, besides that which causes it to secrete the serous fluid; in chronic cases it will often be found, as I have already described, thickened, cartilaginous, or even bony; these conditions are, however, invariably attended by some constitutional derangement. From a reconsideration of all these abnormal conditions, it is clear, therefore, that the nature of the fluid and the condition of the tissues and testicle should all engage the attention of the surgeon; by these he will know whether the disorder is to be considered local or constitutional, the treatment being regulated accordingly.

Orchitis, from any cause, may lead to the formation of a hydrocele, and if the fluid secreted be transparent, the diagnostic mark will be sufficiently obvious from the tumour being opaque posteriorly and transparent anteriorly; but even should the swelling be opaque, the history of the case, the weight of the tumour in proportion to its size, and the characteristic pain of an inflamed testicle, will usually sufficiently explain the nature of the case. I have met with several such cases, and have rarely found it necessary to treat them as hydrocele, but employ the usual antiphlogistic remedies to allay the inflammation of the testicle, and then, by applying blue ointment and camphor with gentle pressure upon the scrotum, the inflammation and the hydrocele will generally disappear together. The disorder will not, however, terminate thus should the orchitis arise from a syphilitic taint, nothing but mercury will then effect a cure. Sir Astley Cooper has published a case in which hydrocele was combined with syphilitic orchitis; the fluid had been previously drawn off but had quickly re-accumulated, and the patient had consulted Sir Astley with the object of getting the hydrocele injected; but he, observing that there were present copper-coloured syphilitic blotches, recommended that the operation of injecting the tumour should not be attempted until the secondary symptoms were cured. Mercury was accordingly administered, and the consequence was, that the orchitis, cutaneous eruption, and hydrocele all disappeared together. I have never seen a case exactly resembling this. Mr. Roberts, of Finsbury-square, sent me a gentleman who had swelled testicle with hydrocele. I drew off the water, and treated the swelled testicle as if enlarged from common inflammation: the hydrocele quickly returned, but the disease in the testicle remained. The patient had no sore throat, nor eruption, nor any other indication of syphilis, although he stated that he had had a chancre four months before. I ordered him calomel and opium night and morning, which was continued until he became constitutionally affected by the mercury, when the testicle was cured and the hydrocele entirely removed. Three or four such cases have occurred in my practice, but, I must acknowledge, without equal evidence of syphilitic taint. When the important feature of transparency is absent from the tumour from any of the causes I have described, the diagnosis must be formed, either positively, from the presence of other signs of hydrocele, or negatively, by ascertaining that none of the diseases with which hydrocele may be complicated are the cause of the enlargement of the part; in that case the swelling can only be the consequence of hydrocele, or some anomalous disease. Under these difficult circumstances, the surgeon should proceed with great caution; for, although the tumour may consist of nothing more than a collection of water, the treatment can only be judiciously regulated by a complete knowledge of the exact position of the fluid and the peculiar structure affected. If an exploration be determined on, it must be pursued with great care, either by puncture with a grooved needle, or by making a careful incision in the tumour; the latter is, I think, the safer operation, as it may be performed under the guiding influence of the sight as well as of the hand. Even when the tumour is transparent, a difficulty may arise in consequence of the testicle being in an abnormal situation within the scrotum. It is usually situated behind and rather below the centre of the tumour; but it sometimes happens that the testicle is adherent to the tunica vaginalis reflexa, and is placed in front of the swelling. When the parts are in this condition the testicle is in danger of being pierced by the trocar; if the hydrocele be transparent, there is no excuse for such a catastrophe, for the exact relative situation of the testicle with the hydrocele may generally be discovered. If the swelling be opaque, the abnormal situation of the testicle can be ascertained by manipulation, as the tumour is fluctuating laterally and posteriorly, but not in front, at the usual point, where, indeed, the resisting hardness will clearly indicate the position of the testicle. I have punctured the tunica vaginalis posteriorly, or at the side of the testicle, in several cases, and I invariably seek for the diagnostic mark of transparency, even if I had tapped the patient before, as the operation may have been the very means of producing the adhesion of the testicle I have just described, and, without precaution, it is very likely to be wounded by the trocar.

On the 30th June, 1841, a patient was sent to me with a hydrocele: he had already been tapped. I examined the tumour, and found there was but little transparency, although, strictly speaking, something of this character could be distinguished. I proceeded to draw off the fluid. In introducing the trocar, I felt a very considerable resistance, and, when I withdrew the instrument, no fluid followed; the patient also complained of a pain in the part, which led me to believe that the testicle had been wounded. I immediately removed the canula, and, upon again examining the tumour with a light, I perceived that it was quite transparent at its posterior part. I then introduced the trocar in this transparent part of the tumour, and drew off seven ounces of fluid. I did not inject the tunic in this case, as I had at first intended; but, nevertheless, the patient was radically cured, and that, too, without suffering any ill effects from the accidental injury of the testicle. There are few operative surgeons who have not at some time fallen into the above error.

I have remarked, in a former part of my lecture, that hydrocele may be mistaken for hernia. I need scarcely say how grave an error this would be, particularly if the surgeon were to attempt an operation. Generally, I do not, however, think it very difficult to distinguish a common hydrocele,

under all circumstances, from a swelling caused by protrusion of viscera from the abdomen, especially from the circumstances, that, hydrocele being unconnected with the abdomen, does not receive those peculiar motions which are always imparted to the visceral protrusion, by contraction of the abdominal muscles, as in coughing; and that a very different character is discovered by manipulation between the contents of a hernial sac and those of a hydrocele, the latter being incompressible, resembling a bladder filled with water, whereas a hernia feels either soft and plastic, as it were, or gives the idea of being distended with gas. Hydrocele and hernia are not unfrequently combined, as in the case I have already described, of the little boy. It appears not unlikely, indeed, that hydrocele may induce hernia, by drawing down, and perhaps weakening, the parts about the scrotum. In treating hydrocele, when thus combined with hernia, the latter ought first to be reduced, and, even then, I think I should prefer not injecting the sac of the hydrocele, but merely content myself with drawing off the fluid. Although I do not distinctly perceive that danger could arise from throwing in the injection, still, as more or less inflammation follows this operation, I should take the safer ground, and only employ the palliative treatment.

I do not think that, practically, there is much danger of taking a hydrocele for varicocele, unless it be a congenital hydrocele. In fact, the character of varicocele is quite different to hydrocele when the tumour is handled, for, instead of appearing to be a closed sac filled with fluid, it is evidently caused by a mass of tortuous vessels from which the blood is free to flow or be expressed by slight force. It is true, in congenital hydrocele the fluid can be forced out of the tumour; but, in that case, the transparency of the tumour would be diagnostic of its being hydrocele. If there be insuperable difficulties in distinguishing the nature of the swelling in the scrotum by ordinary examination, careful exploration ought to be resorted to, exactly as I have already described. This is the only plan for the surgeon to follow, if he desire to escape the dangerous contingencies which would be attendant upon any other active method of treatment.

[To be continued.]

ORIGINAL COMMUNICATIONS.

OBSERVATIONS

ON THAT PORTION OF THE

"SECOND REPORT ON QUARANTINE," BY THE GENERAL BOARD OF HEALTH

WHICH RELATES TO THE YELLOW FEVER EPIDEMY ON BOARD H. M. S. ECLAIR, AND AT BOA VISTA IN THE CAPE DE VERDE ISLANDS.

By J. O. M'WILLIAM, M.D., F.R.S., R.N.
Medical Inspector H. M. Customs.

I had imagined, that all doubt regarding the real nature of the epidemy that prevailed at Boa Vista, during the years 1845-6, had long since been at an end; and it can scarcely be said, that this conclusion was arrived at either hastily or unwarrantably.

My Report "On the Fever at Boa Vista," was delivered to Sir William Burnett a few days after my arrival in England from the Cape de Verdes, in the month of September, 1846, and was laid before the Lords Commissioners of the Admiralty on the 30th October, of the same year, with a letter from the Director-General, in which he stated, that he "could not arrive at the conclusion, that the fever was occasioned by the intercourse with the Eclair."

The Report, and the letter of Sir William Burnett, having been presented to the House of Commons, in pursuance of their address of the 16th March, 1847, were ordered to be printed. And both documents being thus brought before the Profession, were very prominently and fully reviewed in the leading medical journals of the United Kingdom, of France, and of America, the greater number of which had been hitherto opposed to the contagion of yellow fever.

On the Boa Vista question, however, there was an unanimity of opinion, almost, if not wholly, unprecedented in a case of this kind; for, with one very qualified exception, the justice of my conclusions was confirmed by the united voice of the medical Press.(a)

I need scarcely add, that Sir William Pym, the Superintendent-General of quarantine, adopted the views contained in my Report, with the exception of that in which I considered the yellow fever of the Eclair to be an exaltation of the common endemic remittent of the west coast of Africa.

Upon the presentation of the Report of Dr. King "on the Fever at Boa Vista," to the House of Commons, in return to their address of February 4, 1848, the discussion of the subject in the public journals was renewed, and my Report was again subjected to a severe sifting. Dr. King's conclusions were wholly opposed to mine, although our main facts were the same. His views met with no sympathy (so far as I have seen) from the public press, as they were universally declared to be untenable upon the evidence which he himself had supplied. Instead of burdening this communication with extracts from the various reviews, I shall only make the following quotation from a journal that has consistently opposed the doctrine of contagion as applied to yellow fever, which will serve to convey the general opinion of the press regarding Dr. King's Report:—

"After the most careful examination of the subject, as presented by these several documents, we are constrained to confess very candidly, and, we admit, somewhat reluctantly, that Dr. King has failed in his attempt to invalidate the conclusions of Dr. M'William, logically deduced from a connected series of well-defined facts. If it be possible to prove the communication of a disease by contagion, the facts presented by this gentleman, and not disproved by Dr. King, prove, that the fever which occurred in Boa Vista was introduced by the sick from on board the Eclair, and communicated from individual to individual, until it finally extended to the mass of the population."(b)

It even appeared, that Sir William Burnett could discover no support in Dr. King's Report to his dissent from my conclusions, as it was not, on being presented to Parliament and printed, accompanied by any comments from the Director-General.

On the 10th of August, 1849, a Board of medical officers was convened by order of His Grace the Commander-in-Chief, for the purpose of investigating and giving an opinion on each of the following points:—

"1st. Is yellow or Bulam fever a distinct disease, or only an aggravated form of the marsh or remittent fever of warm climates?

"2nd. Does one attack of yellow, or Bulam fever, give, like small-pox, immunity from a second attack, except in very rare instances?

"3rd. Is yellow or Bulam fever a contagious disease?

(a) "We have adopted the evidence of Dr. M'William, because we have felt bound to give credence to what is honestly and candidly stated by an observer, who must have felt the immense responsibility that rested upon him in drawing up his Report.—If we had wished to have tried a great experiment on this subject, with all available precaution, and with all the aids against fallacy that imperfect human reasoning can furnish, it would have been difficult to have devised any more complete and conclusive than that which accident, or, we should say—if it be not profane to judge of the arrangements of the universe—a providential accident, has furnished us in the case of Boa Vista."—*British and Foreign Medico-Chirurgical Review*, Vol. I., page 60.

"We have carefully examined the evidence collected by Dr. M'William, and we now unhesitatingly assert, that the above conclusions flow as legitimately from the premises, as moral reasoning will admit of."—*Dublin Quarterly Journal of Medical Science*, No. XV., p. 192.

"Upon a review of all the evidence adduced in the Report before us, there cannot be a reasonable doubt as to the contagious character of the disease that prevailed at Boa Vista: nor do we think it will be questioned, that the infection was introduced into the island by the sick landed from on board the Eclair."—*Hays's American Journal of the Medical Sciences*, No. XXVIII., p. 427.

There is not room for further extracts, but the exception must not pass without notice:—

"Although we are not convinced by Dr. M'William's reasoning as to the origin of the Boa Vista epidemic in the Eclair, we are, nevertheless, bound to acknowledge that he has exhibited very great knowledge and practical acumen throughout the investigation, and has drawn up a Report which testifies strongly to his abilities, and redounds greatly to his credit.

"——The symptoms and subsequent progress of the epidemic, after its outbreak in Beira Row, clearly demonstrate its identity with yellow fever, and its infectious nature.

"——Dr. M'William appears clearly to have traced the transmission of the fever to the inhabitants of the other villages in Boa Vista, either by communication with the sick, or by the arrival of persons under the influence of the fomites of fever."—*Lancet*, New Series, Vol. II., pp. 496—498.

(b) Hays's American Journal of the Medical Sciences, No. XXXIII. p. 141.

"4th. Is yellow or Bulam fever capable of being imported?"

The Board was consituted as follows:—

President, Dr. And. Smith, Deputy-Inspector General of Hospitals; Dr. Thomas Spence, staff-surgeon, 1st class; John Millar, Esq., staff-surgeon, 1st class; Dr. W. H. Burrell, staff-surgeon, 1st class; Henry Pilleau, Esq., staff-surgeon, 2nd class.

The Board assembled on the 10th of August, 1849, and continued, by adjournments, to the 16th of April, 1850.

At the first sitting it was resolved,—

"First, To attentively read and examine all official or other documents available and likely to elucidate the subject to be investigated.

"Secondly, To receive oral evidence of army medical officers and other persons competent to furnish information on the points in question.

"And, lastly, After having accomplished the foregoing, then to determine the time which will be necessary to enable the Board to form their opinion, and furnish their replies to the questions proposed."

One hundred and twelve sittings, averaging three hours each, were occupied in reading documents, published opinions, and receiving oral evidence; and two months were found necessary for the purposes specified in the last resolution.

The respective opinions of the President and members were found to be as follow:—

As regards the first question,—

"The President and three members, namely, Dr. Spence, Mr. Millar, and Mr. Pilleau, are of opinion, that the yellow or Bulam fever is a distinct disease, etc.

"The fifth member, Dr. Burrell, is of opinion, that the yellow or Bulam fever is an aggravated and occasional form of the ordinary fevers, continued, remittent, and sometimes intermittent, etc. etc."

As regards the second question,—

"The President and one member (Mr. Pilleau) consider, that one attack of yellow or Bulam fever does give immunity from a second attack, except in rare instances. A third member (Dr. Spence) is of opinion, that an attack of yellow or Bulam fever protects the constitution very greatly from liability to a second; but the exact extent requires further observation. A fourth member (Mr. Millar) considers, that one attack of yellow fever does give, like small-pox, immunity from a second attack, except in very rare instances. And the other member (Dr. Burrell) is of opinion, that an attack of yellow or Bulam fever, like length of residence, enables the constitution to resist, to a considerable extent, a recurrence of fever in the same form, but gives little or no protection against what he considers other forms of the same disease, or those which attack the acclimated."

As regards the third question,—

"The President and two members (Dr. Spence and Mr. Pilleau) are of opinion, that yellow or Bulam fever has frequently manifested a contagious power; and that on many occasions the contagious power, if in existence, could not be detected by the most careful observation. One member (Mr. Millar) is of opinion, that yellow or Bulam fever is a contagious disease. And the other member (Dr. Burrell) considers, that nothing sufficient has been adduced before this Board to determine affirmatively a question of so much importance to humanity and science; and believes the yellow fever to be absolutely and universally non-contagious."

As regards the fourth point,—

"The President and three members (Dr. Spence, Mr. Millar, and Mr. Pilleau) are of opinion, that yellow or Bulam fever is capable of being imported. The other member (Dr. Burrell) is of opinion, that yellow or Bulam fever is not capable of being imported."

(Signed by the President and Members.)

[The above contains the substance of the proceedings of the Board.]

On the 31st December, 1850, the Royal College of Physicians of London delivered a Report to the Lords of Her Majesty's Most Honourable Privy Council, respecting the Bulam, or yellow fever, which had been drawn up by the President and Fellows of the College in consequence of a communication from their Lordships.

The points investigated by the College were as follow:—

"1. As to the Bulam fever being *sui generis*, and distinct from remittent or the marsh fever of warm climates.

"2. As to its being an infectious disease; that is, communicable from person to person, and likewise capable of being imported.

"3. As to the non-liability of persons to a second attack of that disease.

"After a very careful consideration of all the facts and arguments adduced on both sides, with reference to the first question proposed, the College are of opinion, that sufficient grounds have not been laid for stating, that "yellow fever" is a disease *sui generis*.

"With regard to the second question, it appears to the College to be sufficiently proved, that this disease is, under certain circumstances, infectious, and, consequently, that it may be imported.

"The principal circumstances under which the infectiousness of this disease is likely to be developed, would seem to be a high temperature and moisture of the atmosphere, particularly in unhealthy seasons, and when the influence of these causes is aggravated by local insalubrity of site, and by the absence of free ventilation.

"That the disease has been in some instances imported, the history of the epidemic fever which occurred in Her Majesty's ship Eclair, and at Boa Vista in 1845, affords conclusive evidence.

"The third question proposed respecting the non-liability of persons to second attacks, does not admit of being settled in a decided manner. Strictly speaking, there is no disease of which it can be affirmed, absolutely, that one attack renders a person insusceptible of a second.

"The College are unwilling to conclude their Report without strongly recommending to their Lordships, that, on any future appearance of this formidable malady, persons should be sent out, thoroughly qualified by education and by habits of observation, to collect evidence on the important questions which have now been proposed to the College. This was done in the case of the Eclair, and most valuable information was thus obtained.

(Signed)

"Francis Hawkins, M.D., Registrar.

"Royal College of Physicians,
December 31, 1850."

The latest investigation into the circumstances connected with the epidemy of the Eclair and Boa Vista is that which occurs in the "Second Report on Quarantine," recently presented to Parliament by the General Board of Health. The professed object of this investigation is to set aside the conclusions of the Royal College of Physicians and those of the Committee of Army Medical Officers, as well as the opinions of the Medical Press in this country and elsewhere; for, at page 189, "Report on Quarantine," it is stated, that, as "the case of the Eclair, and the history of the epidemic fever which occurred at Boa Vista in 1845, have been declared by high medical authority to afford 'conclusive evidence that yellow fever is sometimes imported,' it will, therefore, be necessary to give a careful examination of the circumstances relative to that epidemic;" and at pp. 115-116, "A consideration of these circumstances has satisfied most of those who have inquired into the case, that the arrival of the Eclair at Boa Vista with fever among her crew, and the almost contemporaneous occurrence of a similar disease on the island, were mere coincident events."

There is, in this language, coming as it does from a Board consisting of two lay members and one medical member, a tone of assumption, if not of disrespect, towards the Royal College of Physicians, the Committee of Army Medical Officers, and others, (who from their education, habits, and professional eminence, must be held as at least equally competent with the General Board of Health to make a "careful examination" of the occurrences in the Eclair and at Boa Vista,) unjustifiable under any circumstances, but peculiarly unbecoming of any public Board when making allusion to other Boards, more especially when the respective positions and acquirements of the parties in question are duly considered.

When I first heard that yellow fever was to form the subject of this Report, I could not (judging from the first Report on Quarantine from the same Board) but expect that the doctrine of contagion would be unsparingly, if not unreasonably assailed. I was not, however, prepared for the omission, in a public document, of facts indispensable to a just and correct exposition of the case, or for the numerous mis-statements which are to be found in that part of the "Report on Quarantine," which professes to treat of the Eclair and Boa Vista epidemy.

At the very outset of any inquiry into the epidemy at Boa Vista, there is one point that demands a clear and satisfactory adjustment, viz., the condition of health of Boa Vista, and of the other islands of the Cape de Verde groupe, previously to the arrival there of the Eclair, with her crew suffering from yellow fever. It is further indispensable, to ascertain with precision the state of health of those other islands after the arrival of the Eclair, and the invasion of Boa Vista by the same disease; inasmuch as it is stated, in the "Second Report on Quarantine," page 110, that "in the adjoining island, Porto Praya (San Jago), there was yellow fever while the ship (Eclair) was at Boa Vista. Captain Simpson states, that it "recurred in the following year at Porto Praya, is common there at times, and quite endemic."

And doubtless, could it have been proved, that yellow fever had broken out on San Jago, independently of any source of importation, contemporaneously with the appearance of the same disease at Boa Vista, then there would have been grounds for supposing that it might also have originated spontaneously at Boa Vista, and that the arrival of the Eclair with yellow fever, and the outbreak of this disorder at the latter island, were mere coincident events.

By the concurrent testimony of all I interrogated on the subject,—and they included the most intelligent among the natives and Europeans at the Cape de Verde, and of all who were afterwards examined by Dr. King,—Boa Vista was quite healthy before the arrival of the Eclair.(a)

It is equally certain, that yellow fever had never before been known at Boa Vista—at all events, within the memory of any person living.

The assertion, that yellow fever was at Porto Praya (San Jago) at the period of the arrival of the Eclair at Boa Vista, or during the prevalence of the epidemy on the latter island, is so completely refuted in the documents in the possession of the authors of the "Report on Quarantine," that I cannot help expressing my astonishment that they should have repeated it in their Report.

In my Report (p. 108), I took leave, after due inquiry at the Cape de Verde, to deny the correctness of this statement, which is contained in Dr. Stewart's Report, ("Admiralty Correspondence," p. 88.) (b) At p. 14 of the "Remarks on Dr. King's Report," I cited the testimony of Dr. Antonio José Nunes, Surgeon of the Artillery at San Jago, (of which island Porto Praya is the capital,) who came direct from that place to Boa Vista during the prevalence of the yellow fever epidemy there. Dr. Nunes pronounced distinctly, that the disease at Boa Vista was yellow fever, and "*quite different from those fevers which he saw every year at Porto Praya.*"(c) This, then, is the evidence of an officer who came to Boa Vista from the very spot where yellow fever is alleged to have prevailed at the time, but of which no notice is taken in the "Report on Quarantine." Again, in my "Remarks on Dr. King's Report," p. 10, there is an extract of a letter from the Governor-General to Dr. King, dated December, 1846, in which His Excellency says: "Never a fever with equal symptoms visited these islands before the arrival of the unhappy Eclair at Boa Vista."

The addition of strength to the evidence already published, refuting the existence of yellow fever at Porto Praya at the period in question, is scarcely necessary. I may, however, be allowed to quote the following passage from a letter addressed to me by the late Mr. Macaulay, Commissioner, Judge, etc., at Boa Vista, dated at San Nicolas, March 30th, 1846. Dr. Stewart says, p. 4,(d) "*In the adjoining island, Porto Praya, there was yellow fever while the Eclair was at Boa Vista.*" This statement is entirely erroneous. There neither is, nor has been, one case of yellow fever at San Jago, or any of the islands, except at Boa Vista, and then only since the departure of the Eclair."

With regard to the statement of Captain Simpson, of the Rolla, it is quite evident to me, that he has confounded the endemic remittent of Porto Praya with yellow fever. That there could have been no yellow fever there at the time stated by him, has been already shown by the testimony of the Governor-General, as well as by that of the surgeon of artillery at Porto Praya.

If further proof of the immunity of Porto Praya from yellow fever, at either of the periods in question, were wanting, it is to be found in the following extract from a letter lately received from Mr. George Miller, one of the best educated, most intelligent, and keen observers whom I have ever met. He says:—"With respect to the statement, that yellow fever prevailed at San Jago, while the Eclair was at Boa Vista, or while the fever raged there, I am in a position to say positively and most unequivocally, that it is untrue. I was at Porto Praya frequently during the period of the Boa Vista calamity; and it so happens, that I was also there during the whole stay of Captain Simpson, of the Rolla. From 1838 to 1850, I visited Porto Praya at least twice a-year; sometimes, indeed, three and four, and even five times a-year. I never saw, nor have I ever heard of, a case of yellow fever there; and I am as morally certain that I should have heard, had any such case existed, as I can be of anything. Indeed, there is no record of yellow fever ever having prevailed at San Jago, or at any of the other islands, except at Boa Vista, in 1845-46. I was at some pains to satisfy myself on this head in 1846, when I visited every one of the islands, except St. Vincent. I made it my business personally to seek information on this matter, from the oldest and most intelligent of the inhabitants of each of the islands. I could learn of small-pox being imported in slave-vessels, and of the prevalence, in particular years, of endemic remittent; but every one ignored the existence ever of yellow fever and black vomit. Intermittent fever is common, more or less, to all the Cape de Verds; and every year, about the second month of the rains, a few cases, in some part or other of these islands, manifest themselves."

I think it is clearly evident, that the statement in the "Report on Quarantine," regarding the alleged prevalence of yellow fever at Porto Praya, when the Eclair arrived at Boa Vista, or while the same fever devastated Boa Vista, must fall before the force of truth; and as the authors of that Report declare the *assumed fact* of the existence of yellow fever at Porto Praya, at the periods in question, to be "most material to a right understanding of this whole subject," they cannot but consider the *demonstrated fac of it-non-existenec* at those periods as equally importan to that desirable end.

No notice whatever is taken, in the "Report on Quarantine," of the case of the lamented Dr. M'Clure, who was seized with his fatal illness (fever, with black vomit) the day (Sept. 13, 1845) on which the Eclair and Growler sailed from Boa Vista. This excellent and devoted medical officer, recently promoted after service on the west coast of Africa, was on his way home in the Growler when that vessel arrived at Boa Vista, on the 6th September, and found the sick crew of the Eclair landed at the fort in the small island. On the 8th, he relieved Mr. Maconchy, the surgeon of the Eclair, now almost worn out by his overwhelming duties among the sick at the fort. On the 13th, Dr. M'Clure was attacked with fever, having, for the first time, been on board the Eclair for a few minutes on the previous day, the sick being then re-embarked. In the previous March, the Growler had left the Coast for the Cape de Verd Islands, where the health of the ship's company was recruited, and had returned to the Gallinas and Sherbro' in April, and remained there until July, cases of fever continuing to occur from the consequences of exposure. The crew of the vessel had been quite healthy, with the exception of the gunner, and part of a boat's crew suffering from the common fever of the Coast, for between two and three months before her arrival at Boa Vista.

Sir William Burnett, who cannot be charged with any undue leaning to contagion, clearly admits, that the attack of Dr. M'Clure was due to his intercourse with the sick of the Eclair at the fort. The Director-General thus expresses himself, (when speaking of the fort,) in a letter addressed to the Secretary of the Admiralty, (Correspondence," p. 55):—"It is necessary I should add, that a fever, not originally of a contagious nature, may become so, when

(a) "It does not appear from the statements of the people, whether of the better or the lower classes of society, that fever was prevalent at Boa Vista at the time the Eclair arrived there, in August, 1845; and they are equally positive as to the healthiness of the other islands."—Dr. King's Report, p. 3.

(b) The Report of my friend, Dr. Stewart, was written in London; and upon what grounds he made this statement, I am not yet aware. My refutation of it was grounded on information obtained at the Cape de Verds, and the names of my authorities are given at p. 108, "Report," and at p. 14, "Remarks."

(c) Dr. Nunes's letter is dated at "Villa da Praya." Cape de Verde, March 6, 1847. He adds: "The fevers of Porto Praya take place only in the rainy season, and they are always the same, intermittent or remittent."

(d) Manuscript Report of Dr. Stewart, given me before I proceeded to the Cape de Verde.

the sick are crowded together in a small, ill-ventilated place. *Hence the attack* of Dr. M'Clure," etc.(a)

It is now time to proceed to the consideration of the cases of the two European soldiers at the fort, as they constitute the first link in the chain of evidence connecting the outbreak of yellow fever at Boa Vista with the sick of the Eclair. At page 102, "Report on Quarantine," these attacks are thus accounted for: "Two European soldiers lately arrived in the colony, and, therefore, peculiarly predisposed to an attack of endemic fever, go from Boa Vista, which at that time was healthy, to a confined, unventilated, overcrowded, and filthy spot, on another island, where fever was raging to such a degree, that, within the space of three weeks, there had occurred not less than 60 attacks, and 33 deaths, in a crew consisting, on the arrival of the ship, of 117 officers and men. We submit, that this is no evidence of the propagation of disease by a specific contagion. On the contrary, it is the ordinary production of it by its ordinary cause; namely, exposure to a polluted atmosphere, the pollution being, in this instance, excessive from overcrowding," etc.

Now, in the first place, it is not quite correct to say, that the soldiers had lately arrived in the colony, for they had been thirteen months in the Cape de Verds, and had, consequently, passed through all the changes incident to the annual rotation of the seasons. However, granting, as I have elsewhere done, their "predisposition to an attack of endemic fever," it must at the same time be recollected, that yellow fever, with which they were attacked, and of which they died, was not an endemic of Boa Vista, this disease having never, within the memory of man, been known there before the arrival of the Eclair. The epidemical constitution of the atmosphere is not invoked by Dr. King earlier than the end of September or beginning of October; nor is it assumed, in the "Report on Quarantine," to have had an earlier existence; for the seizure of the soldiers is attributed, not to an endemic, but to an accidental cause; namely, their breathing a local atmosphere "excessively polluted" by overcrowding, etc.

Now, it is fully admitted, that the place was crowded by a ship's crew labouring under yellow fever, which had certainly not been generated, although there is reason to believe that it had become more malignant in character, there. It is admitted, that the soldiers came from a healthy atmosphere to another atmosphere rendered unhealthy, not by a general, but by a local, source of pollution; namely, the congregation of persons labouring under yellow fever, and that the result was, that they (the soldiers) became affected with the same disorder. It is denied, in the "Report on Quarantine," that the attack of these soldiers affords any "evidence of the propagation of a disease by a specific contagion; but it is allowed, that their seizure was owing to to their inhaling the atmosphere, rendered morbific by the sick crew living; and it may be added, dying at the fort: in other words, by exhalation or effluvia proceeding from their bodies. If these admissions be adopted by the authors of the "Report on Quarantine," nothing further seems necessary to prove the communication of the disease to the healthy soldiers by the sick crew of the Eclair. If, on the other hand, they be denied, then it is incumbent upon the authors of the "Report," not only to prove that yellow fever was an endemic of Boa Vista, but that the endemial cause was in operation at the time the soldiers were attacked, or that the soldiers would have been seized with yellow fever, had the Eclair's crew been congregated as they were at the fort, but without any such disease prevailing amongst them.

The next link in the chain, the attack of the negro soldier, is accounted for in the "Report on Quarantine," in the same manner as are the attacks of the European soldiers.

Before advancing to the third link in the chain, (the attack of Anna Gallinha) it seems advisable to take some notice of the state of the weather before this period, and of a murrain among the cattle at Boa Vista, alleged to have existed coincidentally with the epidemy on that island.

(a) "Dr. M'Clure went direct from the Growler to the fort, without having gone on board the Eclair," (he was on board a few minutes.—J. O. M'W.) "and at once entered on his medical duties among the sick located there. In less than three days he was attacked with the disease,—pretty clear evidence, notwithstanding his having been at Sierra Leone, that the fever had become contagious.—*Origin, Spread, and Decline of the Epidemic Fevers of Sierra Leone, etc., etc., etc., by Dr. Bryson, p.* 134.

In my Remarks on Dr. King's Report, p. 6, I stated that, from the evidence of Mr. Macaulay, the Consul, Mrs. Pettingall, and others, the weather was never more beautiful than at the period of the Eclair's arrival at Boa Vista. On the day of the sailing of the Eclair and Growler (September 13th) the weather is described in the diary of the Consul, "as warm in the sun, but with cool breezes. The weather has been of this description from the arrival of the Eclair, and to the date of her sailing we had no rain." By the same diary, no rain fell until the 5th of October. Captain Buckle (of the Growler,) also says, the "winds were N. E. to N. by E. sky always b. c. A little rain fell once or twice during the night while we were there." But, as has been already observed, as neither in Dr. King's Report, nor in the "Report on Quarantine," is an "epidemical condition of the atmosphere," assumed to have existed at this period, this part of the subject does not require further discussion. (a)

By the time Anna Gallinha was attacked (October 12th,) "much rain had fallen, the weather had become more hot, and in short there now, (but not before this,) existed the recognised elements for malarious evolution.—(*Dr. M'William's Remarks, &c.* p. 9.)

It has been seen, that in the "Report on Quarantine," the attacks of the European soldiers, and that of the negro soldier at the fort, were attributed to the crowding of the crew of the Eclair. Anna Gallinha's attack, however, now that the rainy season had set in, is ascribed partly to the exhalations blowing upon the part of the town where she resided, (Beira,) from "a stagnant pool of salt and fresh water," and "from a locality resorted to by many of the people when obeying the calls of nature;" and partly to the "epidemic constitution of the atmosphere," invoked also, at this time, by Dr. King, and the authors of the "Report on Quarantine."

Now, I have elsewhere stated, ("Remarks," etc., p. 9,) that the chief expanse of stagnant water consequent upon the rains at Boa Vista, is not to be found at Beira, where the fever broke out, but immediately behind the main body of the town. As regards the other source of atmospherical pollution, the principal resort of the people for the purpose alluded to, is also behind this part of the town. In fact, in many parts of the town itself, there are receptacles of the same nature.

With respect to the epidemic constitution of the atmosphere, (a term exceedingly convenient, but more adapted to retard than to advance our knowledge of the causes of epidemic diseases,) its assumed existence during the prevalence of yellow fever at Boa Vista, is supposed, in the "Report on Quarantine," to derive support from a disease having at the same time, as it is alleged, proved fatal to numbers of the cattle on the island.

I can only say that, during the months of April, May, and June, 1816, I examined every part of the island, on one occasion, with John Jamieson and my two negro attendants, sleeping in the open air during four successive nights, making the circuit of its entire coast, traversing it in every direction, and, with my barometer, ascending and measuring the height of its principal mountains. I was in every village,—and some of the villages I visited very frequently,—and I entered a great number of houses in each village. Nowhere (and no place could escape me) did I see any evidence of this supposed wholesale destruction among the lower animals. The remains of a very few cattle were, indeed, seen; but, on inquiry, I was told that every year, at the end of the dry season, and after the setting in of the rains, some cattle were lost. At the former period, from actual exhaustion from want of food; a circumstance not to be wondered at, considering the extreme aridity of this long season, which destroys every blade of grass, and every patch of vegetation, that can find subsistence in this barren, volcanic region; at the latter period, the deaths among the

(a) Concerning the rain and the state of the weather, extracts are taken at pp. 110 16 of the "Report on Quarantine," from the letters of the English Consul and of the "British Judge," (the late Mr. Macaulay.) I recommend those who wish to know what were the real opinions of those functionaries regarding the cause of the fever, to read their letters throughout, (pp. 35 to 40, "Correspondence on the subject of the Eclair,") as also the extract from Mr. Consul Rendall's letters at pp. 9, 10 of my Remarks.

No one capable of appreciating the amount of labour involved in making, correcting, and recording barometrical, thermometrical, hygrometrical, and other observations three times every twenty-four hours while I was at Boa Vista, will readily suppose me likely to neglect the necessary inquiries regarding meteorological phenomena at this or any other period of the epidemy.

cattle are attributed to their over-feeding, in this exhausted state, on the rank green vegetation which springs up even there in the plains and water-courses with that rapidity and luxuriance which is known only in the tropics.(a)

I am thus particular regarding this supposed murrain during the prevalence of yellow fever at Boa Vista, because, in a note appended to the Report on Quarantine (p. 317), it is with very questionable taste insinuated, that I had purposely omitted all mention of it, either in my "Report" or "Remarks."

To return to the case of Anna Gallinha. I think I have shown satisfactorily, notwithstanding the statement of Dr. King to the contrary, that this woman was a constant visiter of Miguel Barbosa and his companions while they were in the house at Beira, (Vide Evidence of Miguel Barbosa, pp. 22, 23; of Joana Terceira, p. 28, "Dr. M'William's Report.") But, says the "Report on Quarantine," p. 103, "supposing Dr. M'William's account to be the correct one, it is surely in the highest degree improbable that this attack of Gallinha could be owing to contagion from a man whose illness was so slight, that it did not confine him to his bed for a single day, and which was incapable of infecting his companion, who was constantly with him night and day, when there were such obvious local causes to account for her illness."

It is quite true, that the illness of Miguel Barbosa was slight while he was at Beira; but the history of all contagious disorders abundantly proves, that slight cases have the power of reproducing the same disease in others in a severe degree, and *vice versâ*. Miguel Barbosa's companion was complaining; but, even supposing that he had not been unwell, it must be held in mind, that Anna Gallinha was a European, and, therefore, a much more susceptible subject than he, who was a negro.(b) Although, with respect to the "obvious local causes," as I have already said, "there now (but not before this) existed the recognized elements for malarious evolution," still, I hold, that the Beira Row is less exposed to the source of such evolutions than other parts of the town, in which the other sources of pollution also exist, in much greater abundance. Even supposing the Beira Row to be as bad as the authors of the "Report on Quarantine" desire to make out, it must be considered as a circumstance not a little extraordinary, that this same state of things should have existed probably for half a century, without giving rise to yellow fever until this period, which had been preceded by some rather remarkable occurrences, namely, the arrival of the Eclair at the island with yellow fever, the death of two soldiers belonging to Boa Vista, at the fort, from the same disease; the arrival at Beira of the two sick soldiers from the place where the sick of the Eclair had been lodged, and where they (the soldiers) had already lost their two comrades from yellow fever. It is somewhat strange, to say the least of it, that this disease should further mark for its first victim in Boa Vista, the woman who cooked and performed other offices for those soldiers.

"At this point," according to the "Report on Quarantine," p. 103, "the presumed chain of evidence stops; there is nothing connecting the illness of Gallinha with the next case," etc.

[To be continued.]

(a) John Jamieson, the Consul's storekeeper, now in London, says, "the cattle did not commence dying until after the fever had, in a great measure, left the island. The disease of the cattle every year is caused by the great want of pasture before the rains, and from the overeating of the poor exhausted animals after the rains." "I saw no change in the number of locusts that visited the island in 1845-6, from any other year. More cattle than usual died at the end of the dry season in 1846, but not in 1845." "I was on the island of Boa Vista nine years."

(b) The following facts, arising out of the Eclair and Boa Vista epidemy, may be useful at this period, as well as at other periods of the inquiry;—

On the island of Boa Vista the ratio of mortality amongst Portuguese Spaniards, and French exposed to the fever, was	...	...	...	...	1 in 2·28
English and Americans	...	...	...	...	1 in 1·6
Native population—Slaves	...	...	...	...	1 in 33·1
Free	...	...	...	...	1 in 11·6

Mr Gardner, in an interesting account of a Small-pox Epidemy at Mauritius in the year 1840, read before the Epidemiological Society, states, that the disease was on this occasion introduced into the island from H.M.S. Lily, with between two and three hundred slaves on board, among whom small-pox prevailed, and for which she was performing quarantine in the roads, through the medium of a man who had been in a boat alongside, watering the vessel. The case of this man, who introduced this severe epidemic into the island, and which destroyed thousands of persons, was so slight, that it was for some time doubtful whether it were really a case of small-pox. Twelve medical opinions were taken upon the case, and six considered it to be true variola; the others were of opinion that it was a case of varicella. Mr. Gardner was then referred to, and he declared the case to be one of small-pox; and the authorities at once placed the house in which this man lived in strict quarantine. Ten or twelve days after, a woman who had resided in the same house had the disease. Others living near soon took it, and it ultimately spread from this point over the whole island. The man at first declared he had not been near the Lily; and how he contracted the disease was for some time a mystery. He at last confessed to having been alongside the Lily, and, while there, to having taken some food from a sailor through a port-hole. Quarantine had kept small-pox out of the island upwards of thirty years. Had the channel of communication in this instance remained undiscovered, would it have been said, (one is inclined to ask, with the case of Boa Vista before us,) that, on this occasion, there was a *generatio de novo* of the small-pox virus, and that the outbreak of the epidemy at Mauritius and the arrival of the slave-laden vessel with that disorder were mere coincident events?

ENTROPIUM:

ITS PATHOLOGY PROVED TO DEPEND ON MUSCULAR ACTION; THE SOURCE OF THE MUSCULAR POWER.—A NEW METHOD OF OPERATING.

By HAYNES WALTON, Esq., F.R.C.S.,

Surgeon to the Central London Ophthalmic Hospital, and to St. Mary's Hospital, Paddington.

Entropium, or turning in of the eye-lid, may arise from various eccentric causes, including all kinds of wounds, injuries, and abnormal growths. There is, however, so little remarkable in this state of the affection, so little to be said in the way of generalization, and the treatment is always so obviously in accordance with the general principles of surgery, that I pass it over, and proceed to the common form, idiopathic entropium, and about which there are such numerous theories and dissimilar views, both as to mode of production and treatment.

Of the many reputed origins of the derangement, some are obsolete and need not be recounted; but several others, such as relaxation of the skin of the lid, thickening of the palpebral conjunctiva, shrinking of the tarsal cartilages, occasional faulty action of the orbicularis palpebrarum muscle, combined with one or other of those states, are entertained at the present time, and are ingeniously and plausibly advocated by their several propounders. I question the soundness of these speculations, but admit that there is reasonable probability in that which attributes the disease to occasional faulty muscular action.

To say, that looseness of the skin of the lid allows of inversion of the tarsus, would be to affirm, that, in a healthy eye, the skin is antagonistic to some power acting on the lids,—a statement physiologically erroneous. The skin of the lids is never tense, but always loose, as a natural provision for their unrestrained movements; and this is especially exemplified in the upper lid, where the motions are freer than those of the under. Moreover, it is singularly thin, and apparently devoid of elasticity, or, at most, possesses it in a minimum degree; and were it required to show more than this, I would point to the baggy and even sometimes pendulous state of it in advancing life, co-existent with the perfect integrity of the ocular appendages.

The supposed influence of the palpebral conjunctiva in producing the inversion has been taught for more than two hundred years, and has been particularly urged of late by Mr. Wilde, in a very instructive communication to the *Dublin Medical Journal*, for March, 1844, and since in a pamphlet, for a copy of which I am indebted to the courtesy of the author. But it appears to me, that the morbid changes it may exhibit in these cases are merely the effect of the general irritation of the eye due to the inversion; for in incipient entropium, when the irritation of the cilia is confined to the conjunctiva of the globe, I have not been able to satisfy myself of any condition of the palpebral conjunctiva that may not be seen in a healthy eye. After a time, which varies according to circumstances, when the entire conjunctiva is involved in that general inflammation which is

sure to ensue in the progress of the affection, that on the lids does exhibit various morbid appearances, which, as far as I can make out, differ in no respect from those resulting from inflammation from other causes, and from which the lid does not become curved.

That the unnatural state of the lid may depend on some primary change in the shape of the tarsal cartilage seems most probable, and is that most generally received as the true explanation. To examine into its correctness is a matter of some difficulty, and the only reliable method I can suggest, is to select those cases of entropium that are not complicated with other diseases of the lids, either as a consequence, or what would appear to be usually a precursor, or excitant of the affection, and by which the cartilages may be influenced: for example, those in which there is neither inflammation, nor any of those changes in the lid which arise from inflammation. And it will simplify the inquiry even more to look principally to an inverted lower lid, because that lid offers a greater facility for observation, as the natural direction of its border is outwards and away from the globe; and any change or alteration in its direction can be better appreciated than in the upper, where the margin inclines somewhat inwards. Besides, there is a very marked difference in the size of the cartilages, and which may throw additional light on the inquiry; the lower is about half the breadth of the upper. In the most marked or aggravated stage of entropium in the under lid, the tarsus does not rest against the globe as though it bound it, because of being contracted in any direction; but the lid is so completely turned on itself, that the cilia are hidden, the narrow cartilage is, in fact, rolled up in the lid, and its position is completely reversed. It is dislocated in a manner which I have attempted to show in this diagram. It is evident, from the narrowness of the cartilage, that no curve of it, nor any kind of contraction, could produce those changes in the lid. But, more than this, I have never been able to satisfy myself that the cartilage is ever at all altered or modified; and, if not, it cannot have any degree of influence in producing the inversion.

In entropium of the upper lid, the inverted cartilage rests against the globe, and the convexities of the cilia are then on the cornea, while their extremities are directed outwards, a position that their ends assume from the handkerchief being used in that direction during the frequent calls for its application. In some aggravated cases they lie spread out on the globe of the eye. Now, this difference in the directions of the edges of the lids ought not, I think, to be sought in dissimilar causes, but attributed, I imagine, to the same causes acting on the dissimilar physical constructions of the lids. The cartilage is curved on itself, its breadth not allowing it to be rolled up, like the cartilage of the lower lid.

With an exception or two, the influence of muscular power has been regarded principally in the light of a partial secondary cause, blended with some one of the supposed primary causes that I have examined. And the more general opinion is, that its detrimental action is induced by tegumentary disarrangements, by relaxation, or by swelling of the skin over the upper part of the lid, by which its influence in supporting the muscular fibres of that part is lost, while the remainder of the muscle on which the skin yet acts continues its function, and rolls the edges of the lids inwards. The assertion of the action of the orbicularis depending on the binding of the skin, is thoroughly untenable.

The similarity of all entropium in the direction of curvature, the implication of the whole lid, and the symmetry of the deformity, induced me to attribute the affection to one and the same cause, and I strongly suspected that to be muscular action; for by no other cause did it appear to me that those changes could be produced in the lower lid, when affected with entropium, by which the lid can be so quickly twitched in after remaining in a righted position for a few minutes; but, having some misgiving of the power of that part of the muscle on the edge of the lid, and which is described as the thinnest portion of the orbicularis, to exert such an effect,—for doubtless to that part alone could such action arise,—I made a few dissections, to satisfy myself of its real nature. I found that over the edges of the lids, for about the sixth of an inch, the muscle is thicker, perhaps twice as thick as over the remainder of them; just what would be expected of a sphincter,—the fibres redder, larger, and more compact. In the lower lid, this marginal portion is greater, and the fibres lie irregularly in bundles. This fact seems generally, as far as I can learn, to have been overlooked by modern anatomists, although it was noticed and even figured by the sagacious Albinus. I suspect, that he was the first author in whom originated the name musculus ciliaris, thereby signifying a distinct muscle. Although this term has been retained, it is not generally used in the sense to which Albinus restricted it. To prove what I say, I quote from the late Mr. Dalrymple's "Anatomy of the Human Eye," which has been a standard work for many years:—"The few pale and horizontal fibres which immediately cover the tarsal cartilages, and which are continued to the edge of the palpebral fissure itself, have received the name of musculus ciliaris." Albinus's muscle is only at the edge of the lid.

Just about the time that I was investigating this muscular origin of entropium, one of my colleagues in the Central London Ophthalmic Hospital, showed me that he could, by the influence of the will, invert the edges of both his lower lids, produce the most complete entropium, and conceal his long and numerous cilia. Of course this greatly strengthened my opinion, and I did not hesitate to regard my idea of the cause of entropium as being correct. After that I made some dissections, to ascertain the relation of the tensor tarsi muscle to the orbicularis, and was not a little surprised to find that it has such a connexion with that muscle, that it may justly be considered a part of it—that part which has a bony attachment.

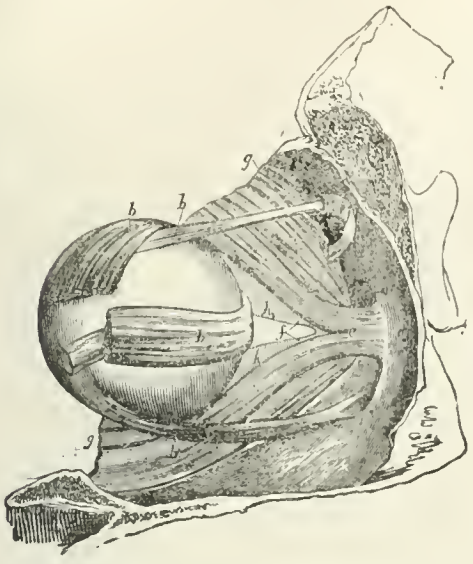
The correct anatomy, and the relations of this supplemental portion of the muscle, have hitherto not been sufficiently understood; but the existence of it was well known to the older and generally more minute anatomists, in proof of which I would merely quote Duvernay, "Œuvres Anatomiques. Paris," who wrote and lectured with great *éclat* in 1761, or nearly a century ago. But it came to be neglected or overlooked, with much of the minute anatomy of the times of Santorini, Morgani, De Graaf, and a host of others, until public attention was again called to its excellence by Rosenmüller.

Dr. Duvernay, in describing the lachrymal sac, and the fibres of the orbicularis muscle connected with it, says, Tome 1st, p. 130, besides these fibres, there is a small muscle within the greater angle which arises from the anterior point of the os planum, and is inserted or attached to the internal curvature of the common tendon of the opposite side of the orbicularis. It is a small muscle which I observed a long time ago. Horner, who has for a great many years claimed the discovery, which, as I have shown, was made and published before he was born, appears to be ignorant of its exact bearings. In his latest writings that I can meet with, apparently the last edition of his work on Anatomy, bearing date 1846, after the principal description of the muscle, which is made to end at the puncta lachrymalia, he adds, "The superior fork, however, has a few of its fibres blended with the orbicularis."

In Arnold's beautiful Tabulæ Anatomicæ Fasciculus duo, the muscle is noticed as a small triangular slip, with the apex towards the corner of the lids, where it is made to terminate.

To speak of it as a distinct muscle, I should say it arises as a thin plane of well-marked muscular fibres of about the fourth of an inch in length, from the vertical ridge on the lachrymal bone, passes forwards and outwards towards the lachrymal sac, and bifurcates in a remarkably distinct manner, the branches proceeding towards the lids, and on their edges become blended with the obicularis muscle. They can be traced to the middle of the lid. In their passage, these branches distribute fibres to the posterior surfaces of the puncta, and some few would seem to surround them. The best manner of tracing it, is carefully to remove the skin from the orbicularis, then to detach the upper and outer walls of the orbit, divide the optic nerve and the

muscles that surround it, and draw the back of the eye outwards and forwards.



Back view of the orbit: the vessels and nerves have been removed, and the eye drawn outwards, to show the origin of the tensor tarsi muscle.
a Globe of the eye.
b b b b Superior oblique, inferior oblique, internal and superior recti.
c Lachrymal sac.
d Muscular origin of tensor tarsi.
e The bifurcation of tensor tarsi, the branches of which give a few fibres to the puncta, and terminate in the substance of the orbicularis.
f The puncta lachrymalia seen in the fibres of the muscle.
g g The orbicularis palpebrarum.
h h Tarsal cartilages, on the anterior surface of which the united tensor tarsi and orbicularis muscles pass.

So great is the variation in the development of this muscle, and also of the musculus ciliaris, that occasionally it is scarcely possible, with the naked eye, to recognise the muscularity of their fibres.

It is not surprising that, as the anatomy of the tensor tarsi had not been ascertained, its physiology was only partially understood, and any pathological state was never conceived. As far as I can ascertain, with the single exception of Dr. Physic, who took the most extended view of its action, and justly supposed that it must exert some influence on the movements of the lids, writers have confined its use to the apparatus for conveying away the tears. In the last edition of Dr. Quain's Anatomy, by Dr. Sharpey, 1848, it is called musculus sacci lachrymalis.

It is as difficult, nay, impossible, to decide, what are the circumstances that bring about such unequal and prejudicial action of the orbicularis, as to account for the production of a squint, or of any other deformity, the result of perverted muscular action, for they occur without the perceptible influence of any cause; and the most that can be said of them is, that sometimes they follow other pathological phenomena of common occurrence, which are then regarded as excitants, and, in the case of entropium, conjunctival inflammation would seem to stand in that relation.

I have founded the treatment on what appears to me to be the pathological interpretation of the affection, and of which the indications are, to overcome the means of inversion by dissecting away the thick marginal portion of the orbicularis, supposing that part of the muscle to be entirely, or nearly all that is at fault, and also to remove as much of the skin of the lid as may be required by its loss to produce such tension as shall overcome and restore to a natural state, whatever unnatural position the other tissues or component parts of the lid may have acquired, from the irregular position into which they have been thrown by the muscle, and which has been made more or less permanent by such changes as inflammation would produce.

Now, as to the manner of operating: let us suppose that the right eye is to be done. An assistant stands behind the patient, and having made the lid tense by drawing it outwards and raising the brow, two incisions are to be made through the skin and muscle, one along the edge of the tarsus close to the cilia, and the second about the quarter of an inch above, and meeting the other at the extremities. The flap thus isolated should be dissected vertically from the one side to the other, and not taken away by horizontal strokes of the knife, or else the muscular portion will not be effectually removed. The wound should be very carefully sponged during the operation. Any arterial jet must be checked by temporary pressure with the finger. I have never found a ligature to be necessary. The exposed surface must be inspected, and, if any muscular fibres have escaped, the forceps and knife must be re-applied. The assistant should not desist until the knife has been laid aside, for the proper retraction of the skin is essential to steady and effectual dissection. Three or four sutures should be used. The cilia might appear to be in danger of being dissected off, but in reality they are not. A part only of the dissection is over them, and, by the loose cellular connexion, the muscle is readily raised from the dense fibro-cellular tissue in which they lie.

The previous observations almost demand a cursory view of the usual methods of operating, and their results; indeed, I think this paper very imperfect without it; yet I fear that its introduction would make my communication too long. I must be satisfied with making the assertion, that there is not any known method of operating for entropium, that can be depended on, except that of cutting off the greater portion of the lid, and which is as bad in principle,—nay, even worse, if the physiological relations of the lid be taken into account,—as to amputate a thigh to cure a popliteal aneurism.

Heretofore, when an operation for entropium has been undertaken with the design of removing any part of the orbiculuris palpebrarum muscle, it has been executed on very different principles, and in a very different manner to that I now advocate, and with very different results. The marginal part of the muscle, the musculus ciliaris, has been untouched, and only a bit of the centre of that on the lid has been snipped out. The only exception I know of is in the practice of Mr. Key. I am astonished that the notice of the operation he performed, and which is in the *Lancet* for 1825, page 235, should have escaped the attention of our writers on ophthalmic surgery. It is very lately that I have been acquainted with it, long after I had matured my own views. I cannot say whether Mr. Key continued to execute it, and what were his ideas on the subject in later years. The report runs thus:—"Mr. Key considered the inverted state of the tarsus to arise from the action of the orbicularis palpebrarum muscle. With that view he determined on laying bare the substance of the lower tarsus, and dissecting off the fibres of the orbicularis. The operation was performed by first turning out the lid, and then making an incision through the skin along the whole length of the lower eyelid, at a few lines distance and below the ciliary ridge; the integuments were carefully elevated by means of dissecting forceps, and the fibres of the orbicularis thus exposed were as carefully removed; there was considerable bleeding from the parts; the portion of skin which had been raised was laid down, and the wound dressed by means of adhesive straps, with a compress applied on the skin. The result is said to be successful. Mr. Tyrrell and Mr. Travers had operated previously, the first by cauterisation, the second by removing a portion of skin without success."

M. Desmarres has not overlooked the influence of the orbicularis in producing the inversion, and he gives a case that he thinks solely due to it; but he does not recognise its general operation, and he significantly indicates how little he appreciates the principle of Mr. Key's execution, and the triumphant issue of the case, by asking, in a commentary on the proceeding, "Is it to the incision of the skin, or the excision of the muscle, that the success is owing?" Spasmodic action of the muscle is spoken of by foreign authors, but with much difference of opinion concerning its frequency in producing entropium. The usual Continental mode of operating on the orbicularis is subcutaneous incision, which seems to have been unsuccessful; that of M. Janson de Lyon is a terrible affair, the cutting out of several vertical portions of skin, including some fibres of the orbicularis. Dr. Mackenzie, in his only notice of operating on the muscle, informs us, that it may be proper, after removing the cutaneous fold, to snip off a few fibres, so as to form a firmer cicatrix, actually fixed to the cartilage; and Mr. Lawrence, a much later author, echoes the same thing, for he writes, "In an incipient case, it may be sufficient to excise a portion of skin; this remedy will, at least,

answer the purpose for a time. To make the operation more effectual, a portion of the orbicularis should be removed also, that a firmer cicatrix may be produced; or the acid may be employed, using it more freely, so that its action may extend deeper, and a solid scar be the result."

A narration of cases, with the various symptoms and terminations of entropium, must be excluded from this paper, which is intended to embrace only general principles.

As trichiasis commonly exists with entropium, and the operation I have advocated bears on the united affections, I shall say a few words relative to it.

With inversion of the upper lid, there is not unfrequently decided trichiasis, and, whether the two are due to the same exciting cause, or the trichiasis have been the original affection, or merely an effect of the inversion, it matters nothing as far as the treatment is concerned; yet it may not be amiss to remark, that, with severe entropium, the edge of the lid can rarely for any length of time escape from being affected by the general inflammation, and that the cilia will the more readily retain any unnatural position in which they may be placed. And I am inclined to regard the trichiasis more frequently as an effect, because it is generally of one form, that of a separation or twisting in of the innermost of the cilia from their fellows, and that without any alteration or degeneration in the individual hairs, and because the removal of the entropium is generally sufficient to clear the globe of them. Although, practically speaking, such a degree of trichiasis matters little, it is important, before operating for the entropium, to ascertain whether there is also trichiasis, and whether the restoration of the lid to its natural position will or will not counteract the maldirection of the cilia. Should it not be sufficient, then more skin must be taken from the lid than would otherwise have been necessary, and a slight degree of eversion of the centre of its edge produced, and which must necessarily have its limit. When it is apparent that such moderate eversion will not suffice, the treatment must depend on the degree of the trichiasis; if it be general, the entropium and it must be attacked by one operation. The cilia must be excised at the same time, that a sufficient extent of the skin of the muscle should be removed. But, when the trichiasis is partial—and, for the most part, it is—the muscle should first be dissected away, and then the irregular cilia removed. When there is doubt about the necessity of removing them, attend to the entropium alone, and observe the result, because it is not always possible before the operation for the entropium has been done, and the lid recovered from it, as well as from any inflammation and swelling that the entropium may have induced, to ascertain with exactness to what extent the trichiasis may be benefited. If, as is commonly the case, a patient applies to be treated for entropium, with many of the cilia broken, and some just about to be restored after having been plucked out, it cannot be known what direction they may assume when growing out; and such cases should be watched.

It can be very seldom that the removal of entropium from the lower lid does not at the same time separate any irregular cilia from contact with the globe, for a single exception only has occurred to me.

55, Grosvenor-street.

EXCISION OF JOINTS.

By G. M. JONES, Esq.,
Surgeon to the Jersey Hospital.

[Concluded from page 437.]

Case 1.—Catherine Anderson, aged 47, unmarried, was admitted into the hospital July 4th, 1851, in consequence of an affection of the right arm and elbow, which altogether incapacitated her from following her usual employment, that of cook. Her appearance is not that of a healthy person, for though by no means emaciated, her complexion is sallow, and her looks are indicative of pain and uneasiness.

For many years has experienced pain down the arm and elbow, for which no advice was taken, and no remedies employed save liniments, as she always regarded the affection as rheumatic. Three years since the pain (which she represents as having always been much more acute during the night than in daytime) increased so much as to induce her to consult a surgeon, and shortly after his attending her an abscess was opened midway down the front part of the humerus; this was a considerable time healing, and has left rather a deep scar. Since that time she has suffered much more than she did before; she also dates the contraction of the elbow from that period. The catamenia have always been irregular.

Present Appearance.—The arm is bent at a right angle; the external condyle of the humerus, when pressed, gives considerable pain, but scarcely so much as is experienced when the olecranon is touched. The joint, which is considerably puffed, particularly at its humeral part, admits of very slight motion; there is considerable thickness and hardness of integument down the back part of the lower half of the arm, considerable heat of surface, and occasionally a throbbing sensation is complained of. Appetite very indifferent; bowels generally constipated; tongue coated; pulse 94, weak.

From the day of admission, to the 24th November, the different means, both local and constitutional, which are recommended in cases of this nature, were tried, but totally without success. The pain had now become so great, and the poor woman's nights were so extremely restless, as to make her most anxious for the removal of the arm. I must candidly avow, that I had misgivings as to whether this were not more a case for amputation than excision. The appearance of the lower end of the humerus impressed me, as well as others, with the belief, that the shaft of the bone participated, to a great extent, in the disease which, without doubt, existed in the joint itself. Fearing this was so, I was led to operate differently to what I had done in Ste. Croix's case. Instead of making my incisions like the letter H, I made them in this form ⊣, which was accomplished by two strokes of the knife; the first commenced half way down the back part of the humerus, was carried in a straight direction till it reached the external condyle, along the side of which and the olecranon it was afterwards directed, and in the same manner along the inner condyle and head of the radius; these parts being dissected, and the joint thus perfectly exposed, the whole of it was seen to be in a miserable state of disease; it was, however, most gratifying to discover, that the shaft of the humerus was entirely sound. There was matter both inside and outside of the joint; the head of the radius was considerably diseased, so that it was absolutely necessary to remove more bone than in Ste. Croix's case, in which, to all appearance, caries existed to a far greater extent. The operation did not occupy much time; the integuments were brought together by eight sutures, and a few adhesive straps, with lint dipped in cold water, completed the dressing. The limb was placed in a triangular splint, and quinine wine and nourishing diet commenced the same day, up to the 28th, not one bad symptom had appeared; on that morning the bowels were acted on for the first time. All the dressings were removed, and it was found, that almost the whole extent of the incisions had united by first intention. From this date to December 13th the dressings were removed every second day, when they became no longer necessary, every part having entirely healed. On the third day after the operation the patient sat up the greater part of the day, and she has since left the hospital for days together. She is now able to raise the whole arm without any assistance, and I make no doubt will shortly bend and straighten it at pleasure.

In this case 2½ inches of bone were removed.

It may perhaps be considered, that I have been tediously minute in entering into the origin, progress, and treatment of these cases. Had they not differed in many essential points, the full detail of one, and the mere mention of the result of the others, might have sufficed for any practical purpose; but, as the constitutions were by no means the same, the causes which laid the foundation of disease, and ultimately led to the resection of the joints, dissimilar, the result of the operation, though satisfactory in all, yet different in each case, I have been induced to note down more than at first sight may appear necessary, and also to make a few remarks which, I trust, may not appear altogether uncalled for.

Perhaps no two cases more dissimilar in essential points than those of Handsford and Le Gros could fall at the same time under treatment. In the former, no decided scrofulous diathesis was observable; her parents are healthy, and none of their offspring have the slightest appearance of struma. Her disease was not the effect of injury, and it would appear, from facts which have lately come to my knowledge, that the primary affection of the knee was nothing more

than one of rheumatism, the result of cold and exposure to wet, which might probably have yielded to rest and judicious treatment, had not the same exciting cause which first produced inflammation acted over and over again. The progress of the disease was so slow, that the constitution became as it were, for some years, habituated to it, so that it was not many months before the operation was resorted to that it had progressed so far as to preclude all hope of cure, or of anchylosis taking place, and, when it was performed, a delay of some weeks, at least, might probably have been allowed, before the life of the patient would have been so endangered as to necessitate the amputation of the limb. Le Gros's case was, in its most important points, different. Born of strumous parents, he was not only predisposed to scrofula, but his glandular system had already been affected by slight causes before he received the blow which eventually led to the destruction of the joint. Always of a delicate and feeble constitution, he was little able to grapple with the general derangement commonly produced by caries of the bone. A more wretched case could not well have presented itself; hectic fever, with its worst concomitants, had literally worn him down to a mere skeleton. The abscess, too, in the thigh, from which issued such an abundant discharge of whey-like fluid, with flakes of coagulated lymph floating on it, and which evidently communicated with the affected articulation, was by no means an encouraging feature in the case. In Handsford's there was much which afforded reasonable hope of a favourable termination. None of the symptoms were sufficiently bad to counterbalance the promising ones, whereas, in Le Gros's, all were of the worst character. The former evinced a sweetness of disposition and moral courage seldom met with, and which must have assisted Nature in the task she was called on to perform; while the latter was pettish and fractious in the extreme, and so irritable, that even a look was sufficient to prostrate him to a degree almost bordering on syncope.

It may be said, and with some show of reason, that this was not a subject in which resection of the joint ought to have been practised. Certainly it was not the case I should have chosen for a *coup d'essai*, and yet it was, in every respect, the kind of case I felt, at the time, anxious to meet with. Sarah Handsford was then progressing favourably, and I considered the success which I flattered myself as likely to follow the operation as perhaps the result of its having been performed before the constitution had materially suffered. I therefore wished, if possible, to prove, by the evidence of facts, that if excision of the knee-joint is in any case a justifiable operation, the cautious rule laid down by many of the most celebrated surgeons, "that only under peculiarly favourable circumstances should the removal of the joint surface be preferred to amputation," admits of being extended in reference to cases where it can, with safety to the life of the patient, and with success also, be performed. There are some who disapprove altogether of this operation, and not a few who are but lukewarm supporters of it. I can well understand the caution recommended by those who advocate the resection of the knee-joint, but am at a loss to comprehend why it should be altogether denounced, as, although some cases are recorded of complete failure, where the limb has proved useless, and even death has resulted, still it should be remembered, that, in the hands of Parks, Crampton, and others, it has been eminently successful.

Mayo, an author of high and well-deserved celebrity, in his "Outlines of Human Pathology," appears, judging from the following paragraph, to denounce all resections of joints, save that of the shoulder. He thus expresses himself:—"Of excision of the articular ends of bones in joint diseases, what I have seen of it leads me to speak with no approbation; I suspect, where it has been performed successfully, it has been performed before the degree of exhaustion which renders an operation decidedly necessary has arrived; where an operation is clearly required, the constitution has generally no longer force enough to support the tedious process of restoration which follows excision, it is better, in my opinion, to wait till all chance of other cure has failed, and then to amputate." I cannot subscribe to these views; and, whoever reads the cases of Ste. Croix and Le Gros, will, I think, consider me justified in stating, that, even where the result of amputation is doubtful, excision may be, as these instances prove, successful.

The cases of Ste. Croix and Anderson are of practical interest, the latter strikingly exemplifying the immense advantage gained by operating while the soft parts are in a state of integrity; while the former proves how correct was the opinion of the elder Moreau, "that the degeneration of the soft parts, depending alone on disease of the joint end, should by no means forbid the operation of excision." I believe that, without being over sanguine, I may be allowed to hope that Anderson's case will, to say the very least, prove quite as successful as Ste. Croix's; and yet I feel persuaded, that a continued delay of three or four weeks would have brought the integuments and muscles of the elbow of the former into as wretched a state of disease as existed in those of the latter. This case, then, proves how much is gained by an early removal of the diseased bone. Anderson's arm was perfectly healed in nineteen days,—Ste. Croix's took six months and upwards before this desirable end was attained; the arm required daily dressing for more than half a year, while the other within a month required none whatever. Had I waited "till all chance of other cure had failed," I might with reason have expected to find my patient having "to support the tedious process of restoration which Ste. Croix had, on this very account, to contend with; or, if in his case I had followed the plan recommended and adopted—amputation, I should not, as at present, have the satisfaction of finding that my patient is able, from the saving his arm, to maintain a wife and large family by resuming his former employment.

In a paper read by Mr. Gay,(a) a short time since, before the Medical Society of London, that gentleman strongly advocates free and deep incisions along each side of a diseased joint, as the best method of effecting a cure, and, at the same time, preserving the limb. He regards resection as "not only a useless, but an unphilosophical mode of treatment for diseased joints." Far be it from me to oppose the opinion of one whose opportunities of judging of the advantages of one method of treatment over another must necessarily be much greater than my own; but I believe all those members of the Profession who have seen the portions of diseased joints on which I have operated, will agree with me, that it would have been a much more "unphilosophical mode of treatment," as well as a "useless" expenditure of time, to have endeavoured to cure, by means of incisions, cases in which, not only the cartilaginous surfaces, but the structure of the bones themselves were implicated. So far am I, however, from condemning the practice of free and deep incisions, that I have already tried it in several cases, one of which is recent, the patient, Jane Burton, being still in hospital. The disease was of at least twelve years' standing, and suspecting, in consequence of a constant discharge of ill-conditioned pus about the diseased joint, that the upper part of the femur was in some degree involved, I made an incision by which the bone was laid perfectly bare from just below the trochanter downwards to the extent of at least four inches. The wound thus made was filled with pledgets of lint, and gradually healed by granulation. Whether the cure, which appears perfect at present, will prove a lasting one, must be left for time to decide.

Two reasons have been urged against the propriety of excising joints; one, that this operation places the life of the patient in far greater jeopardy than does amputation; the other, that even when successful as far as concerns life, it is more than problematical whether the limb thus saved will be of any use. These reasons, at one time considered powerful, not to say conclusive, have very much lost their weight. There are now many who believe, "the most discreditable operation in surgery is an amputation,"(b) and that "a determination for or against amputation is really a determination for or against the patient's existence."(c) In early life, where a man's surgical knowledge has advanced but little beyond theory, the deductions drawn from the experience of others must of necessity be the rules for his line of practice; but when, by practice, he has been enabled to test the truth or fallacy of his guides, he then chooses for himself that plan which appears to his judgment to promise the surest present relief, together with the smallest amount of future inconvenience to the patient. Not being aware if, in the London hospitals, a yearly account is published of the recoveries and deaths after capital operations, I am unable to ascertain the per centage of the successful

(a) Vide *Lancet*, Nov. 22, 1851.
(b) Skey's "Operative Surgery."
(c) Pott's "Surgery."

cases over the unsuccessful. From a statement given some time since, I infer that a regular return is made at certain periods from all the principal hospitals in Paris. The statement to which I allude embraces a period of five years, from 1836 to 1840, and contains the following list of amputations, with their results:—

	Cases.	Deaths.	Recoveries.
Thigh	201	126	75
Leg	192	106	66
Arm	91	41	50
	484	273	211

Showing, that out of 484 amputations, 64—over one-half of the cases—died.

It being only during this year that I have attempted the resection of diseased joints, my experience may perhaps be considered as insufficient to warrant my offering satisfactory evidence for or against this operation. The result, however, of this experience, limited as I admit it to be, has fully impressed on me, that excision is not generally attended with greater danger to life than is amputation. This is evidently proved by the result of the capital operations above alluded to (though at the same time I feel persuaded, that the great per centage of fatal cases in the Parisian Hospitals are not altogether data to go by). The first objection, therefore, falls to the ground, and the termination of the only four cases which have occurred at this Hospital,(a) so far answers the second, and in a great measure may establish as a fact, that limbs can be saved which formerly would have been removed, as well as that disease of the bone must have progressed to a very great extent not to admit of removal without implicating other parts; but in advocating, as I must certainly do, the excision of joints, and while wishing others to follow a practice which I cannot sufficiently regret not having pursued earlier, I must impress on their minds, that the saving a valuable limb requires a sacrifice of time and an amount of trouble on the part of the surgeon much greater than is needed in ordinary amputations. It will not do to imagine, that when the instruments are laid aside almost all is accomplished, or that that part which requires a steady hand and presence of mind, together with a knowledge of the parts to be operated on, embraces the whole of the task which devolves on us. The operation itself is but the mechanical portion which these requisites can in a great measure accomplish, and which brings many witnesses round us; but it is where this has been done that our chief employment may be said to commence in the after-treatment, that practical part where we generally find ourselves deserted, and on which principally rests the success of our first endeavour, and the future well-being of our patient. There are cases in which the surgeon ought for a considerable time to act, as it were, the part of head-nurse, so that every change of symptom might at once be attended to. This can only be effected by constant watching. We may have attendants on whom we can place a certain degree of reliance, but it is far better to trust to our own observation; many symptoms and appearances which to others may seem too insignificant to be reported, may in reality be the sources from which important inferences are to be derived; and I feel convinced, that, if this were acted on as a more general rule, the final result of many operations would be as much noticed as is the *éclât* with which they have been performed. For many years past I have almost invariably pursued a stimulating plan after capital operations, and, I believe without a single exception, after those which have been performed in consequence of chronic affections; and in no one instance have I had reason to regret this course. The treatment recommended by authorities is very contradictory, some advocating an antiphlogistic plan, while others administer bark and wine. The former method is, I believe, still very much, if not altogether, adopted in France and other parts of the Continent; at no period, moreover, has it been so generally pursued in this country, and, as far as I have had opportunities of ascertaining, is by no means the general practice of the present day. I have every reason to believe that an eminent surgeon, (Mr. Skey, of St. Bartholomew's Hospital, to whom I owe a deeper debt of gratitude than words of mine can express,) ranks among the advocates of the latter plan, for, in a case of diseased os calcis, in which his high surgical attainments, guided by a most correct diagnosis, preserved a limb which was all but condemned to amputation, recommended stimulants immediately after the operation, and with signal success. It is to be lamented that others do not follow his footsteps, not only in adopting this plan of treatment, but also in reprobating the evacuant practice, the administering aperients immediately after operations—a practice which, unfortunately, is still persevered in by many, and which, I feel persuaded, often defeats Nature in the object she is striving to perform. To lay down anything like positive rules for after-treatment, would be quite as faulty as the invariably abiding by one plan. The surgeons of the old school frequently cling to a certain treatment, and to remedies they have been for years in the habit of adopting, and, regarding all changes or discoveries as ephemeral, treat them with contempt. Times are, however, happily changing fast; and, instead of placing implicit faith on authorities, men judge in a great measure for themselves, and guide their practice, not from preconceived opinions, but from results.

I am inclined to believe that, when fresh from the schools of medicine and surgery, we are all liable to an error which a little experience, gained but too often at the expense of our patients, soon corrects. The rapid pulse, the furred and coated tongue, with heat of surface, are regarded as unequivocal signs of inflammation; and our treatment is in accordance with our diagnosis; both are at fault, and either the patient sinks, or Nature, in whose powers we do not always sufficiently rely, triumphs over our treatment; but how lengthened and how slow becomes the recovery!

It will be seen, that the stimulating plan was most rigorously followed in the cases I have given the history of; it was commenced immediately after each operation, and steadily pursued for a considerable time. It is not in these cases only that a similar course has been followed; and I cannot otherwise than attribute the great success which has attended the many amputations I have performed, mainly, if not entirely, to its adoption.(a) The dread of producing too great or too sudden a reaction often leads to a mode of treatment which, in my humble judgment, is not only prejudicial to the patient, but opposed to anything like sound reasoning. It is a principle in English surgery to obtain union by the first intention, whenever it is possible to do so; and I know of no means more likely to gain this end than the rousing, if I may so express myself, of the general system. What is the state in which we usually find our patients when they are placed on the operating table? Most of them are emaciated to mere skeletons, the consequence of hectic fever, and the different drains, colliquative sweats, diarrhœa, etc., occasioned, it is true, by a local affection, but at the same time one which influences, in a greater or less degree, every part of the sufferer's frame. Why, then, the dread entertained by many of producing too great a reaction in subjects of this kind? The reasonable cause for

(a) These are the only operations of excision I have performed in the hospital. I have however, another to record, which proved unsuccessful. A lady came from the country, to be under my care, having for nine years laboured under an affection of the knee, of which the general appearance evidently showed disease of long standing. The operation of resection was performed on the 4th September, and thus far with perfect success, every portion of diseased bone (including femur, tibia, and patella, the two former being in a state of caries, and the latter considerably disorganised) was removed. The first dressing was most gratifying,—almost the whole of the wounds had united by first intention, so that every hope was entertained of a speedy recovery. On the eighth day diarrhœa came on, followed almost immediately by dysentery. No treatment pursued was able to check it, and the patient sank on the 17th. There was a rather remarkable feature in this case,—the dysenteric symptoms did not in any way interfere with the healing process in the knee, and a few hours before death, when the limb was dressed, everything connected with the operation presented a most healthy appearance. It would, perhaps, be too much to assert, that the operation was not the cause of death; it is, however, certain, that almost immediately after this operation, dysentery broke out in the immediate neighbourhood; and that the mortality in this town, principally from this affection, was greater than it had been at any other given period during the year; and though, on the one hand, I am willing to admit, that had the operation not been performed, an attack of this prevailing disease might not have caused the death of my patient, still, on the other, I cannot but believe, that had the epidemic not existed, the operation would have proved eminently successful. This opinion may be wrong, and, for the sake of argument, I will suppose that it is so; still, four successful operations out of five, or 80 per cent., cannot otherwise than prove that excision of a joint is by no means more dangerous to life than is an ordinary amputation.

(a) It is not in cases of amputation and excision only that I consider the stimulating plan as offering far greater advantages than the antiphlogistic. Some time since, in a case of lithotomy, where a calculus almost the size of a pullet's egg was extracted, I at once commenced this treatment. My patient was cured and able to leave the hospital on the 19th day; and lately, in one of very large diffused popliteal aneurism, in which the femoral artery was tied, the same treatment was pursued with perfect success; though it had been a matter of deliberation before the operation whether amputation were not the more justifiable course.

fear is, that our first dressing will prove that the powers of the system have been too weak, and that no adhesive inflammation has taken place; and consequently the tedious and wasting process of healing by suppuration is the reward obtained by our milk-and-water treatment. No man will for a moment suppose it to be in what I have termed the mechanical part of surgery that the Parisian operators fail. Few men are to be found who operate as Dupuytren did; and yet it is probable, that in the Hôtel Dieu the number of his unsuccessful cases equalled those of others whose operations were performed in a much less masterly style; but, by all, the after-treatment was conducted on the same principle; and the best operations of one of the first of French surgeons but too often proved as unfortunate in their results as those performed by men in every way his inferior.(a)

The wish to advocate, as far as my humble testimony may do so, a mode of practice so much approved by Syme, of Edinburgh, as well as by many eminent surgeons of London and Dublin, together with these lengthened remarks, may appear like egotism, but it gives me sincere gratification to have this opportunity of adding that, during all the operations above mentioned, I have received the most liberal and disinterested support from many of those among my Professional brethren whose esteem I value, and on whose opinion I place reliance; and much of the success which has attended my cases of excision may be attributed to the unfailing kindness and attention with which two, in particular—Drs. Brohier and Blood—have, regardless of time or trouble, assisted in watching the progress of the patients. To both those gentlemen I feel deeply indebted, not for this only, but also for many valuable suggestions; so that, if any merit be due to me for being the first to introduce this mode of practice into the island, it must, in common justice, be shared by them.

St. Heliers, 17, Old-street.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. THOMAS'S HOSPITAL.

By J. L. MILTON, Esq.

DISEASE OF THE LARYNX—TRACHEOTOMY—NECROSIS OF THE CRICOID CARTILAGE, AND ABSCESS BETWEEN THE LARYNX AND ŒSOPHAGUS OPENING INTO THE ŒSOPHAGUS.

C. W., a widow, aged 36, under the care of Dr. Peacock, leading an irregular life, was admitted into St. Thomas's Hospital on the 2nd of March, 1852. She stated that she had a venereal affection about eighteen months before, and that she had suffered since that time from sore throat, with hoarseness, difficulty of breathing, cough, and expectoration. She had been an out-patient, under Dr. Peacock, for three weeks before her admission, and, while under treatment for the secondary laryngeal affection, was taken much worse. When admitted she laboured under considerable febrile disturbance, with pain in the side, and other symptoms of subacute pleuro pneumonia of the left lung. This attack was subdued by leeches, blisters, salines, etc., and she was, to a considerable extent, recovered, when, on the 13th, she was found to have taken fresh cold, and the laryngeal symptoms became much aggravated; the breathing was rapid and difficult; no appearance of inflammation could be detected on examining the throat; and, as the mouth was freely affected with mercury, a blister was applied to the nape of the neck, and the dose of antimony which she was previously taking was increased. On the 16th, the symptoms had become very urgent; she was much prostrated; her face was sunken but not livid; the pulse quick and very feeble; the respiration was attended with a loud stridulous sound, and she complained of a constant sense of suffocation. During the previous night she had had several paroxysms of extreme difficulty of breathing, during which she felt as if on the point of suffocation. On consultation with Dr. Barker, it was decided by Dr. Peacock to have recourse to tracheotomy without delay, and the operation was performed by Mr. Le Gros Clarke, at three o'clock in the afternoon. Mr. Clarke, after exposing the cartilages of the trachea, endeavoured at first to introduce a trocar and canula, but, from the extreme mobility of the larynx and the constant coughing, without success; an ordinary trachea-tube was, therefore, substituted, and introduced into an opening made into the trachea; a large quantity of muco-purulent fluid was evacuated; the difficulty of breathing, in a short time, became less; the pulse sensibly stronger, and the expression of countenance improved. After the operation she had occasional severe fits of coughing, with increased difficulty of breathing, followed by the evacuation of much muco-purulent matter; but, upon the whole, she passed a good night, and slept towards morning for two hours continuously. On the 17th she was much relieved; the expression of countenance was more natural; the respirations not much accelerated, equal, and free; the tongue moist, but covered with a slight white fur; the pulse 92, and stronger; the lips and face were of a good colour, and she intimated that she felt much better. She was directed to take a mixture containing the sesquicarbonate of ammonia, compound tincture of camphor, ipecacuanha wine and senega, at intervals of three hours, and to have wine, arrow-root, and beef-tea frequently. For the several following days, she continued to improve; her breathing was generally easy, but was aggravated at intervals when the tube became obstructed by the secretion, but was relieved after the cleansing or removal. The secretion, however, gradually decreased in quantity, and the cough became less troublesome, but the obstruction in the larynx did not give way, and the closure of the orifice of the tube, for a very short period, induced a return of the difficult and stridulous respiration. At first, the wound in the neck being deep, the tube lying at its base very readily became obstructed, and was not easily removed or cleansed. Subsequently, however, a larger tube, resting on the integument, was introduced, and from this, together with the less amount of secretion, she was able to breathe with sufficient freedom. She, however, took very little nutriment, and could only be got to take small quantities of beef-tea and jelly, and was chiefly supported by stimulants. Her strength gradually declined; the pulse became quick and feeble, the tongue furred and somewhat dry, and there was occasional diarrhœa; the wound secreted very freely, and became sloughy. On the 8th of April, the tube was removed, and she breathed freely through the opening in the trachea. She died exhausted on the 11th.

Post-mortem Examination.—Body much emaciated; at the anterior and lower part of the neck, immediately above the sternum, there was an oval, funnel-shaped opening, about an inch and a half in length, which communicated by an aperture a quarter of an inch in diameter with the trachea. The sides of the wound were red and granular, and the larynx presented evidences of considerable old disease. The epiglottis was contracted and irregular above, and the mucous membrane covering its surface and the arytænoid cartilages, was thickened and œdematous. Opposite the cricoid cartilage there were the remains of several partially healed ulcers, and in the centre of one of them there was a minute aperture, only capable of giving passage to a bristle, which communicated with a small cavity situated behind the larynx. The trachea, larynx, and bronchial tubes, to their smallest ramifications, were highly congested, and loaded with thin mucus, containing numerous opaque flakes. The small cavity, before referred to, was situated between the larynx and œsophagus, and occupied chiefly the position of the posterior part of the cricoid cartilage, and was filled with flaky pus, containing several small and rough fragments of bone, which were all that remained of the posterior and larger part of the cricoid cartilage. In addition to the minute aperture by which this cavity communicated with the larynx, there was a second oval opening about half an inch in its largest diameter, by which it opened into the œsophagus. The abscess was separated from the cavities of the larynx and œsophagus only by their mucous lining, and must have produced obstruction of both those cavities, though more especially of the larynx.

The pleura covering the anterior portion of the right lung was rendered rough and opaque, by a thin layer of tolerably recent fibrin, and at the posterior part there were adherent bands. The right lung was completely solid everywhere, and was somewhat smaller than usual. On section it had a pale greyish appearance, much resembling that of the third stage of pneumonia; but the lung was firm, not breaking down except on firm pressure. It yielded a considerable quantity of fluid, which was for the most part thin and serous, excepting where the tissue was broken down, in which case the fluid which exuded seemed to consist of a mixture of serum and pus. The left lung was congested throughout; the lower half of the upper lobe was solid, and the consolidated portion contained more blood than that of the opposite side. The os uteri presented an irregular ulcer on its right side, which was well-defined, deeper than a simple excoriation, and granular on the surface. The other organs of the body were healthy.

(a) It must not be supposed, that I make these observations without authority. In the "Archives Chirurgicales," M. Malgaigne, a metropolitan surgeon, who derived his information from official reports, attributes the mortality which occurs in the Parisian hospitals to "neglect of after treatment." He does not, it is true, say anything for or against the dietetic treatment, but his remarks on the after treatment speak volumes.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening,	May 22.	ROYAL INSTITUTION. *Subject*:—Prof. FARADAY, "On Points Connected with the Non-Metallic Elements." Three o'Clock.
——	——	MEDICAL SOCIETY OF LONDON.—*Subject*:—Dr. SIBSON, F.R.S., "On the Use of the Chest-Measurer in the Diagnosis of Diseases of the Chest." Eight o'Clock.
Monday,	May 24.	ROYAL INSTITUTION. *Subject*:—J. CONOLLY, M.D., "On Insanity." Four o'Clock.
Tuesday,	May 25.	ROYAL INSTITUTION. *Subject*: — E. LANKESTER, M.D., "On the Physiology of Plants." Three o'Clock.
——	——	ROYAL MEDICAL AND CHIRURGICAL SOCIETY. Half-past Eight o'Clock.
Wednesday,	May 26.	ROYAL INSTITUTION. *Subject*:—J. CONOLLY, M.D., "On Insanity." Four o'Clock.
——	——	HUNTERIAN SOCIETY. Eight o'Clock.
Thursday,	May 27.	ROYAL INSTITUTION. *Subject*: — R. WESTMACOTT, Esq., R.A., "On the History and Practice of Sculpture." Three o'Clock.
Friday,	May 28.	ROYAL INSTITUTION. *Subject*: —Dr. PERCY, "On the Modes of Extracting Gold from its Ores." Half-past Eight o'Clock.
Saturday,	May 29.	ROYAL INSTITUTION *Subject*:—Prof. FARADAY, "On Points connected with the Non-Metallic Elements." Three o'Clock.
——	——	MEDICAL SOCIETY OF LONDON.—*Subject*:—Dr. ROSE CORMACK, "On the Medicinal Uses and Therapeutic Relation of Mercury, Iron, and Arsenic." Eight o'Clock.

Medical Times & Gazette.

SATURDAY, MAY 22.

UNPAID MEDICAL OFFICERS.

WE desire to direct the attention of our readers to the following Advertisement, emanating from the Committee of the Royal Maternity Charity. It appeared in our columns on the 24th ult., and want of room alone has prevented an earlier notice:—

"In consequence of the resignation of one of the Physicians of this Charity, a vacancy has occurred. The division to be filled up is south of the Thames, extending from Nine-elms to the Commercial-docks, and from London-bridge to Camberwell-green. Candidates for the appointment (*which is honorary*) are required to be Fellows or Licentiates of the Royal College of Physicians of London; and the Physician appointed must reside in the above-named division. Testimonials to be forwarded," etc. etc.

We can scarcely trust ourselves to comment on this announcement. The Directors of a rich and extensive Charity publicly solicit the *gratuitous* services of some educated Physician, to superintend the patients of their Institution, and to expose himself to be called at all hours of the night and day to the most urgent cases that occur in the whole range of medicine and surgery, throughout a district extending over an area of, as nearly as possible, *twelve square miles!* FROM NINE-ELMS TO THE COMMERCIAL-DOCKS, AND FROM LONDON-BRIDGE TO CAMBERWELL-GREEN!! So runs the Advertisement; but in the official Report of the Charity, the boundary is stated to extend "three miles from St. Paul's;" which would enlarge the area to *half a mile beyond Nine-elms, and half a mile beyond Camberwell-green.* The ground specified in the advertisement measures four miles in a straight line east and west; two miles and a quarter in a straight line north and south; two miles and one-third in a line drawn south south-west from Waterlooo-bridge to the boundary at Camberwell; and three miles and a quarter in one drawn south-east from the Commercial-docks to the same spot. Besides the densely-populated districts close to the bridges, on the Surrey side of the river, the area embraces the whole of Kennington, Newington, Walworth, Bermondsey, Rotherhithe, Peckham New Town, and a part of the parishes of Deptford and Camberwell, and extends some distance along the Clapham and Brixton roads.

Well, indeed, may it be said, in regard to public medical appointments, that Boards and Committees are daily guilty of acts which, as individuals, they would be ashamed to practise. Well may this Advertisement raise the ire of the Profession. It is generally conceded, that there is no department of medical practice so arduous, toilsome, and harassing, so destructive to health and to comfort, as the obstetric. The difficult and dangerous cases which occur in this branch of the Profession require consummate skill and judgment, as well as instantaneous attention; and yet we see a body of men who desire that educated gentlemen should give up their time and talents, spend their money, and damage their health, for the very equivocal advantages tha would result from taking the medical charge of the patients of a Charity whose affairs are conducted by a Committee so liberal and generous as this has proved itself to be. And these gentlemen will not be contented with anything but a first-rate article for the valuable equivalent they offer, of serving them gratuitously. Candidates must be Fellows or Licentiates of the Royal College of Physicians, forsooth! and they are expected to send in testimonials of their fitness, and bow low, no doubt, before the great men whose sense of what is due to the Medical Profession has prompted them to issue such an unworthy as well as impolitic appeal.

Were the Royal Maternity a newly-organised charity,—were it struggling with the difficulties usually attendant on recent establishment,—with funds inadequate to supply its wants, some excuse might be found for such a notification on the part of the Directors. Then the Profession, with that humanity which has become an actual proverb, would no doubt respond with alacrity to the call. But, considering that it has been in existence ninety-five years,—that it is in possession of a yearly income of nearly eleven hundred pounds in funded property,—and that, from its foundation, the Physicians have always received some remuneration for their time and trouble, it is a great deal too bad, that an attempt should now be made to wring, from the members of our Profession, valuable assistance, rendered with great labour and at a great sacrifice, FOR NOTHING—and this, too, at a time when the feeling of medical men in general is so much alive to the injustice of requiring them to work without remuneration; and when the sentiments expressed in the temperate and admirable protest of the Assistant-Physicians and Surgeons of the London Hospital, which we published in our Journal of the 5th instant, have met with such a lively echo in the breast of every member of the Profession. We call on our brethren to scout the proceedings of the Directors of the Royal Maternity Charity, and to show a proper indignation at the degradation to which it is sought to expose them. We feel satisfied, that no physician can be found who will so far forget what is due to the Profession and to himself as to accept such an office upon such terms.

Independently of the injustice that the Profession would suffer, should the intended plan of the Committee be carried out, the subscribers to the Charity would have good reason to complain. Money has been largely contributed, under the belief and expectation, that the system in force at the time the contributions were made would continue to prevail so long as circumstances permitted. One part of that system was, that such payment should be rendered to the Physicians

for their services as might induce men of skill and experience to devote a part of their time to the interests of the Charity. We ourselves know of Governors who never would have contributed a farthing towards the funds of the Charity, if they had imagined that the patients would at any time be left to the care of an unpaid medical staff, with all the disadvantages that must accrue in such a Charity as this from an arrangement of that description.

It is idle to suppose, that Drs. Sims, Squire, Dennison, Davis, the Ramsbothams, and Sir Richard Croft would have devoted themselves for so many years to serve this Charity without some pecuniary remuneration, were it only sufficient to pay coach-hire to the many cases to which they used to be called. Under their superintendence, indeed, it grew up to be the largest institution of the kind in Europe, considerably more than four hundred thousand women having been gratuitously delivered through its instrumentality. We shall see what it will become under the altered system which it is now proposed to adopt.

THE CHILDREN'S HOSPITAL.

Out of every three children born in the Metropolis, one dies before it reaches the age of 10 years. Such is the sad tale told by the Report of the Registrar-General. Can there be a more forcible appeal made to the public on behalf of this excellent little hospital than this naked, startling fact? Year by year, this huge town has been crowding and squeezing, growing wider and wider, and higher and higher, shutting out the light and the air, without which, children, like flowers, pine and die. Yet, with all these direct attacks upon feeble young life, there has not been, until the present year, a single hospital in the Metropolis devoted to the diseases of children, which must seem strange indeed to those who have travelled, and know that no large Continental town is without one. The general hospitals, it is true, receive children now and then, but to a very limited extent; and, indeed, we do not think it is desirable to mix the very young with adults. There is to us no more depressing sight than to see a very young child in a ward without companions or amusement, and forced to maintain an unnatural stillness. Group children, and nothing but children, together, and the scene is immediately changed, and the most powerful of all stimulants to a drooping frame—amusement and happiness—are supplied.

We paid a visit the other day to the Children's Hospital in Great Ormond-street—a by-gone neighbourhood, whose great houses seem left as landmarks to show the ebbing of the great western tide of fashion. The solemn old mansion, with its noble rooms and splendid oaken staircase, once alive with stiff petticoats of the time of Queen Anne, after being deserted for years, is again the scene of active life. Our ideas of an hospital receive a pleasant shock upon entering a spacious suit of drawing-room apartments, the walls decorated with painted flowers and figured groups, and the mantel-pieces of elaborately carved marble. Around these apartments, the beds of the little sufferers are ranged, and in the centre of the largest room is an ample table—when we saw it, covered with toys. A little party of convalescents were grouped around it, merry as grigs. Toys, there can be no doubt, form the best and most active medicine of the establishment. We saw a large red horse and a Noah's ark, doing more good than countless pills or draughts, if we might judge from the bright eyes of the children. Our suspicions that this was the case, were completely confirmed upon a visit to the dispensary of the establishment, which could well go into an ordinary-sized sea medicine-chest,—not that the remedies were homœopathic in the least. Our old friends pulv. ipecac., hydrarg. c. cretâ, and vin. ant. tart., smiled at us from shiny bottles, in a most orthodox manner; but it was evident, from the smallness of their capacity, that the call upon them was not very extensive. The success of the treatment in this hospital—and we believe it has been very successful—depends upon judicious medical superintendence, good light and ventilation, and fun and amusement. A better site, in the midst of a very populous district, than the one chosen could not have been found. There is scarcely a wider thoroughfare than Great Ormond-street to be met with in town, and the gardens behind are of very large extent; indeed, seeing this open space in the full flush of spring, as we did, we could not help being struck with the country-like aspect of the verdant and wooded scene. The pleasure-ground of the hospital is now being laid down with gravel, and fitted up with numerous gymnastic arrangements, suitable for the amusement and exercise of very young children; this will be a very powerful auxiliary to the general treatment of the hospital.

Air and light, it cannot be too much insisted on, are two of the main elements of health in childhood. We even think, that a large glass conservatory or covered space, such as every hospital ought to have, should have been the first thing erected in these grounds. Into such an apartment the convalescent children might be turned, in all weathers, with as *little* clothing on as possible; for nothing, we are convinced, is so conducive to health, as a free contact of the surface of the body with light and air. At present there are only twenty beds in this establishment, of which at least two-thirds are medical. Fevers are banished to the upper part of the house, and no communication is allowed between the ward appropriated to them, and those below. Even visiters who have entered it are tabooed, and are not allowed to go into the other apartments. By means of this strict quarantine, all fear of contagion—the only one which can be urged against children's hospitals—is, it is believed, avoided. The house is capable of holding fifty patients; this number of beds will soon, we hope, be made up.

Her Majesty, we perceive, has graciously become the Patroness of the establishment, and made a donation of 100 guineas; other subscriptions are fast flowing in, and sympathy on behalf of poor sick children is so universal, that we trust speedily to see this hospital become rich. The intention is to make 100 beds the full complement: this accomplished, the hospital will become *the school* for the study of the diseases of children. At the present moment the medical student looks in vain for any field in which to study this important branch of medicine. It is very common indeed to hear the remark, "I know nothing of the diseases of children;" and this from young men whose practice will mainly lie in attending to their ailments. On the behalf of the progress of medical knowledge, then, we hail the successful establishment of this hospital; at the same time we wish to urge upon the Committee that, when the proper time comes, its doors shall be thrown open to medical students *free of expense*.

We have urged to the utmost of our power, that it is unfair and unjust towards the student to rob our great hospitals of special diseases which they pay to study, and then to demand fresh fees of them at the smaller hospitals. The Children's Hospital is not open to the great and grave objections which we have shown to exist against many special hospitals; it is only special as regards age; our re-

marks respecting them will not, therefore, apply to it. We think, however, that the design of the Institution would not only be eminently promoted, but that it would be wise and graceful of the Committee to set the example of acting liberally by those who wish to make the diseases of children their study, and of showing to the student that he is not an animal the mere use of which is to give out fees,—an opinion which his present treatment is but too apt to engender.

THE GOLD DIGGINGS.

It were bold to pretend to a prescience which others have disclaimed; yet it does not require a prophet to foretell some of the changes which the "gold-diggings" will effect in the Medical Profession. There is no longer a doubt, but that the precious metal may be dug from the Australian soil in boundless quantities, by any one able-bodied, in good health, and not above being his own servant. Of course, we do not apprehend, that four men will again dig 40,000*l.* worth of gold-dust in six weeks; nor, perhaps, can all labourers make 1,500*l.* a-year. But such things have been, and may again occur; and we lately heard from a member of the Profession, who had visited the diggings, confirmation of that with which the daily papers teem.

Civilization is a very great luxury, and worth buying at a very heavy price; but, unhappily, there are many without the means of purchasing admission within the pale of its advantages, or of maintaining their position there when once entered. Who would willingly be surgeon to an emigrant ship, at 2*l.* to 3*l.* a month: or accept the post of "assistant," for a remuneration which a butler would decline, when his time may be more profitably employed elsewhere? We apprehend, and indeed know, that many of those whose ties to the mother country are not of the firmest character, will, instead of undertaking these ill-paid and unsatisfactory offices, join together in small parties to seek a brighter fortune in a more prolific land. In many a Society, and in many a School of Medicine, mutterings of such half-formed plans are already heard. In this country we may therefore expect, that medical knowledge will rise in value, as there will be a smaller supply in the market: while, if the price offered for it be non-remunerative, the possessors will turn their capital to some better account. We are told, that some labourers at the diggings offered a gentleman fifteen shillings a-day to become their cook: what would a man in suffering pay to him who could afford him relief?

We fancy, that the gold discoveries will thus be beneficial to the Medical Schools. All who leave their country with a knowledge of medicine, to trust in a half-organised society to their own resources, will possess very great advantages. A little knowledge, dangerous as it may be, is certainly better than complete ignorance; and hence a year or two passed in study at a large hospital may be regarded as a very good preparatory step to the careful emigrant. It must not, however, be misunderstood, that slight medical knowledge will supersede the necessity of manual labour; on the contrary, he who seeks to build up a fortune in the wild Australian regions must be able-bodied, persevering, and young; he must go out to dig, and to perform such services as labourers at home perform.

What changes may ensue in the next five years! That they will be beneficial we doubt not; but their exact bearings upon the present state of things is a point yet to be determined. The difficulties which have for years beset the path of the medical practitioner in this country have driven men to courses, for the sake of a living, which all sensible persons regret. Homœopathy, hydropathy, mesmerism, etc., have each had their votaries; but now we earnestly trust, that the same energy expended in propping disreputable systems will find a more healthful and more creditable vent in the fields of honest industry.

REVIEWS.

Homœopathy and the Homœopaths. By J. Stevenson Bushnan, M.D., Fellow of the Royal College of Physicians of Edinburgh; Physician to the Metropolitan Free Hospital. Pp. 214. London: Churchill. 1852.

Homœopathy Unveiled, etc. By W. P. Brodribb, M.R.C.S. Eng., and Member of the Court of Examiners of the Society of Apothecaries. Second Edition. Pp. 15. London: Highley. 1852.

Dr. Bushnan's mission seems to be to commit murderous assaults on quacks and schismatics. Some time ago, he pilloried Mr. Atkinson and Miss Martineau; and now he has fearlessly attacked the homœopaths. He has got them in a cleft stick, and pinched them pretty severely. Dr. Bushnan has poured Hahnemann's Organon into his crucible, and the boasted precious metal turns out to be merely German silver.

But let us allow Dr. Bushnan to speak for himself:—

"I frequently receive letters," says he, in his Preface, "to the following effect:—

"'I am a country practitioner; I buy few books, and the only journal I see is the *Medical Times and Gazette*. On the other hand, I am often teased by questions about homœopathy, and am called upon to explain or to refute its doctrines. In the *Medical Times and Gazette* I find little beyond generalities. Will you then tell me where I may procure a brief account of Hahnemann's theories, and a succinct refutation of them?'

"The only work on the subject with which I am acquainted is Dr. A. Wood's 'Homœopathy Unmasked;' but as it, however excellent, does not exactly supply what I consider to be, at the present moment, much wanted, I venture to offer the following pages to my professional brethren, in the hope that they may find in them what I believe they require."—(Preface.)

This intention has been well executed, and in no work with which we are acquainted, has Hahnemann been done such perfect justice to. Dr. Bushnan has shown how all the truth of his system was taken from the recognised knowledge of the Profession, while everything that was original to himself is in the last degree absurd. Nay, it is very remarkable, that Hahnemann's own arguments are so ridiculous to an unprejudiced mind, that they almost always contain their own refutation.

Dr. Bushnan occupies forty pages with an exact analysis of Hahnemann's principal work, the "Organon." The aphorisms contained in that book are here given in eighty-four propositions, in a condensed form; and, although we have not compared the analysis with the "Organon," we have reason to believe that it is very accurate. Then, having got the facts before him, Dr. Bushnan proceeds to discuss each proposition. He shows how many of them are the common recognised truths of Medical Science, and how, when Hahnemann ceased to be a plagiarist, he ceased to be true. The refutation is done with great skill; and, without expecting too much from any appeal to the reason of homœopaths, we do really think that they must vote Hahnemann to be old-fashioned, and set up a modern prophet instead of him. We shall see Hendersonians or Dudgeonites yet arising, we are quite sure.

We cannot venture on any extracts from this section of the work; all parts of the argument are interwoven, and to separate any would hardly do it justice. The misty doctrine, *similia similibus curantur*, the infinitesimal doses, the theory of potentizing, the itch hypothesis, are all discussed with equal vigour. Under the head of infinitesimals, many of the ingenious formulæ which have been employed to express these marvellous quantities are given. One or two may be quoted:—

"Soon after the first promulgation of Hahnemann's doctrines it was suggested, that if the decillionth part of a grain have any efficacy, an ounce of medicine (epsom salts) would be sufficient to physic all the Calvinists of Switzerland. But later and careful systematic calculations have shown that this is stopping very far short of the truth. The 10th solution alone would, as M. Cass

has shown in the *Journal de Pharmacie* for 1845, require a body of water 500 times greater than the bulk of the Lake of Geneva, or a sea somewhat larger than the Gulf of Venice. To make the 11th solution, a quantity of water greater than the Mediterranean would be necessary; the 12th solution could scarcely be accomplished in an ocean 500 fathoms deep, and covering the *whole* surface of the earth; while the 30th, or decillionth solution, to be performed on 15 grains of a homœopathic medicine, would require a layer of water 1,300 yards in depth, and extending over a space *equal to the whole area of the solar system*. If the whole solar system were buried in an ocean extending in depth from the sun to Neptune, it would not form a sufficient medium for dissolving the same quantity of medicine down to the 500th dilutions of Drs. Korsakoff and Grosse."—P. 157.

The itch hypothesis is one that bothers the homœopaths much; the more enlightened perceive that it must be abandoned, but the true followers of Hahnemann still stick to it. One of these wiseacres, with cruel logic, has proposed to administer the itch insect to cure all the ills that flesh is heir to. Faugh! even an infinitesimal dose of Scotch fiddle would be sickening, though all the water from here to Neptune were used to dilute it. The homœopaths would be wiser if they kept the itch in its natural place, viz., in the palms of their hands, and did not cram it, really as well as figuratively, down the throats of their patients.

At page 211, Dr. Bushnan gives Hahnemann his *coup-de-grace*, by summing up the conclusions to which the strict induction has led.

We cordially congratulate Dr. Bushnan on this useful work, and we beg all our brethren to *arm themselves with it*, if the enemy invade their territories.

Mr. Brodribb's pamphlet is a smart, clever, and less professional attack than Dr. Bushnan's. It is very clearly written, and the successive exposure of the system is ably managed. The pamphlet has now reached a second edition, and will, we trust, go through many more. We would recommend such practitioners as have patients who are becoming globulistic, to send them a copy of Mr. Brodribb's pamphlet.

Climate of Italy in Relation to Pulmonary Consumption; with Remarks on the Influence of Foreign Climates upon Invalids. By T. H. Burgess, M.D., etc., lately Physician to the Blenheim-street Dispensary. Pp. 206. London: Longman, Brown, Green, and Longmans. 1852.

Time was when only the most wealthy sought restoration to health from residence in the sunny South. It is not so now; steam has practically reduced the distance, and with it the cost; and hosts of individuals, instead of solitary sick men, ask, Where shall I spend the winter?—Which is the best place to reside in during the summer?

This book is one of the best English medical guides to those desiring answers to the above questions. Dr. Burgess has himself resided in various parts of Italy, and speaks with the authority of a practical man.

"The purpose of this volume is to show," says its author, "that to send *consumptive* patients to Italy, or to the South of France, for the benefit of their health, is a mistake;" and in furtherance of his object Dr. Burgess points out the peculiarities of the climate of each of the favourite places resorted to on the Continent by consumptive patients, and their injurious effects. Before recommending to this class of patients a journey to the classic regions of the South, we strongly advise our professional brethren to run through Dr. Burgess's volume.

Annals of Anatomy and Physiology. Conducted by John Goodsir, F.R.C.S. Lond. and Ed., etc. etc. Part II. Edinburgh: Sutherland and Knox. 1852.

The first part of this work appeared in February, 1850, and was to have been continued quarterly. We are glad to see the second part, although two years have passed since the appearance of its predecessor.

The present Part contains the conclusion of Dr. Sanders's paper on the Spleen, and of Mr. Zinglas's elaborate description of the tongue of man and certain of the mammalia; an account of some experiments and observations made on the body of an executed criminal, by Kölliker and Virchow; notes, by Dr. Dobie, of the observation of cilia in two species of Grantia. The lithographic drawings of the first Part are replaced in the present by a very excellent plate on steel, illustrative of Mr. Zinglas's paper on the tongue of the chameleon, and by some good woodcuts.

We trust the success of this Part will be such as to induce its conductor to continue the publication at regular and tolerably brief intervals.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM JOURNALS.

INFLUENCE OF MEDICINES ON THE TEMPERATURE OF THE BODY.

Three French physicians, MM. Dumaril, Demarquay, and Lecomte, have associated themselves together for the purpose of inquiring into the effect of medicines on temperature. Their experiments were made on dogs. To state the results briefly, they found that cantharides, in doses of from one to six grains, raised the temperature in six hours nearly four degrees Fahr.; canella, in a dose of from eight to ten drachms, elevated the temperature 3° Fahr.; and a second dose raised 2° more. One drachm of secale cornutum in five hours increased the temperature about 1½° Fahr. in five hours. Acetate of ammonia injected into the veins augmented also the temperature; put into the stomach, it produced the same effect in a less degree. Phosphorus, in doses of a grain and a-half to three grains, lowered the temperature. Strychnine produced no effect.

Certain purgatives were tried, such as colocynth, castor oil, etc.; the effects varied according to the dose; usually it was lowered, and then elevated to about 1½° Fahr. above the standard.

Emetics,—as ipecacuanha, sulphate of copper,—produced in small doses a little elevation; but, in large doses, lowering of temperature to the extent of 2° or 3° Fahr.—*L'Union Médicale.*

INFLUENCE OF SECTION OF THE PNEUMO-GASTRIC NERVES ON ABSORPTION.

An eminent veterinary surgeon, M. Bouley, (the son,) has presented to the Academy of Medicine an interesting memoir on the above subject, in which a remarkable fact has been made known. If the pneumo-gastric nerves be cut across in the horse and in the dog, and if a dose of nux vomica be then exhibited, the dog is poisoned, the horse is unaffected. It might then be supposed, that section of the vagi arrested absorption in the horse, but this is not the case. On examining more deeply into the subject, M. Bouley discovered that at no time does absorption go on from the stomach of the horse; the stomach, in fact, in the horse is a small sac, when compared with the enormous size of the intestines. It serves only as a conduit; and, in a few minutes after deglutition, (quelques minutes après leur ingestion,) the food is found in the vast cœcum, where absorption chiefly goes on. When the vagi are cut, the only effect is to paralyse the muscular fibres of the stomach, and thereby to cause the retention in that organ of the poison. In the dog, on the other hand, and in carnivora generally, the stomach is capacious, and food is digested in, and absorbed from it. Section of the pneumo-gastrics, although it paralyses its muscular coat, does not hinder absorption.—*L'Union Médicale, Mai* 6.

STARCH IN CUTANEOUS DISEASES.

Cazenave has lately employed, largely, powdered starch, pure or mixed with oxide of zinc or camphor, in various diseases of skin. In acute eczema, impetigo, herpes, acne rosacea, after washing the parts with a weak alkaline solution, and well drying them, some of the following powder is sprinkled, viz.,—oxide of zinc, one part; starch powder, fifteen parts. In prurigo of the axillæ, the anus, or the genitals, a quarter part of camphor is added. — *L'Union Médicale.*

SOLUTION OF NITRATE OF SILVER IN PRURITUS OF THE GENITALS.

Winternitz has lately recommended a solution of nitrate of silver (grs. iii. ad ℥i aquæ), in pruritus of the vulva or scrotum. The solution is applied three times daily, and two cases are given in which it succeeded after a fortnight's trial, when all other means had failed.—*Zeitschrift der Gesell. der Arzte zu Wien.*

CONSTITUENTS OF THE SPLENIC FLUID.

In the fluid obtained by boiling a spleen in water, Scherer has discovered that, besides some of the constituents of the juice of flesh, some nitrogenous principles are present, viz., uric acid and a body hitherto unknown, for which he proposes the name hypoxanthin. The formula for the latter is $C_5 H_2 N_2 O$. Hypoxanthin is a powdery crystalline mass, soluble in 1090 parts of cold, and in 180 parts of warm water; heated with nitric acid, it forms a

yellow stain, which liquor potassæ, in the cold, turns red, and, with heat, changes to a lively purple, like murexid. The composition of hypoxanthin is of great interest, as may be seen by placing together its formula, and the formula of zanthin, as determined by Liebig and Wöhler, and of uric acid:—

Hypoxanthin	$C_5 H_2 N_2 O$
Zanthin	$C_5 H_2 N_2 O_2$
Uric acid	$C_5 H_2 N_2 O_3$

Hypoxanthin has been found, not only in the spleen of men and oxen, but in the fluid pressed from the muscular substance of the heart. Also, very lately, Gerhard, a pupil of Scherer's, has detected it in small quantities in the blood of oxen.

In addition to uric acid and hypoxanthin, Scherer has found in the splenic fluid other bodies, viz.:—

1. A new nitrogenous crystallizable body, which resembles, excepting in containing no sulphur, the bile principle; he terms it lienin.

2. An albuminous substance, in combination with much iron.

3. Iron in combination with acetic and lactic acids.

4. A carbonaceous pigment, analogous to the colouring matters of urine and muscle.—*Canstatt's Jahresbericht, Erster Band, Neue Folge*, 1852, *pp.* 91, 92; *and Verhand der Phys. Med. Gesellschrift in Würzburg, Zweiter Band, p.* 298.

COMPOSITION OF THE SUCCUS ENTERICUS.

The composition of the intestinal fluid has lately been made the subject of an inaugural dissertation by Zander, a pupil of Bidder and Schmidt. An abstract of it is given by Scherer. The fluid was obtained by tying the ductus communis choledochus and the pancreatic duct, and then making an intestinal fistula; it was semi-fluid, stringy, colourless, always alkaline, though not always equally so. It contained, in 1000 parts, from 30 to 38 parts of solids, of which from 15 to 25 were soluble in alcohol, and from 5 to 13 were insoluble. It contained no albumen. It was found to possess the properties of dissolving flesh and coagulated albumen, and of changing starch into sugar. The pancreatic fluid and the bile did not appear to heighten the power it possessed of dissolving albumen.—*Canstatt's Jahresbericht*, 1852, *Erster Band, p.* 100.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

THE MEDICO-STATISTICAL SOCIETY.

In a former letter, we mentioned, that Dr. W. Gairdner had brought the subject of the registration of deaths under the notice of the Medico-Chirurgical Society, and that, acting on his representation, a Committee had been formed to consider the scheme which Dr. Gairdner had proposed. That Committee reported most favourably, and advised the Society to endeavour to work out the plan as originally advanced. To this proposal an objection was taken, chiefly on the ground, that it was *ultra vires* the Medico-Chirurgical Society to take up the subject of the registration of deaths, or to vote a sum from the Society's funds for that purpose. Subsequently, the report of the Committee was agreed to by a decided majority of the Society, but it was deemed advisable, on account of the feeling entertained by the Committee, to dissociate the proposed scheme from the Medico-Chirurgical Society, and to afford an opportunity to those who felt interested in it, to countenance it as a separate and distinct undertaking. With this view, there has originated the Medico-Statistical Society, of which the following gentlemen are office-bearers:—Dr. Alison, president; Drs. Christison and Begbie, vice-presidents; Drs. Maclagan, Seller, Newbigging, W. Robertson, and R. Mackenzie, members of Council; Dr. Taylor, treasurer; Drs. W. Gairdner and J. W. Begbie, registrars and secretaries.

A considerable number of medical men in Edinburgh and Leith have already become members of the Society, and, counting from the first day of the present month, the registration has commenced. The distinctive peculiarity which it is the design of the system adopted by the Society to carry out is, that medical men shall record as many of the morbid phenomena in each case as may appear necessary to explain the event, and that all the phenomena so stated shall be separately registered. It is within the contemplation of the Society at some future period to take up the consideration of any question, the determination of which may appear to require the co-operation of a number of medical men. Meantime, the Society confines its attention to the main object of its foundation, the registration of causes of death. Convenient schedules are now in the hands of the members; these, as they become filled up, are forwarded to a registrar, whose duty it is, if necessary, by a personal interrogation of the reporter, to amplify the information each schedule contains, but especially to arrange all matters of nomenclature as regards the individual cases, and to register the causes of death according to the Society's approved nosological table. From the interest, indeed enthusiasm, with which the members of the Society are already prosecuting the registration, we venture to predict a brilliant and successful career. The experiment the Society has undertaken is a very useful one, and may lead to very important results, even to a modification in the existing national systems of registration. We shall, therefore, take many opportunities of informing the readers of the *Medical Times and Gazette* of the progress and success of the Medico-Statistical Society.

LEGACY OF 30,000*l.* TO THE EDINBURGH INFIRMARY.

We are informed, on what we consider to be very good authority, that the above munificent sum has been left to this noble charity. Large as the sum is, it will not appear an inexhaustible one in the funds of an Institution whose average expenditure exceeds 8000*l.* per annum, and which, during the prevalence of epidemics, has often greatly surpassed that. We have always considered the case of the Edinburgh Infirmary a peculiarly hard one; it is not merely a local hospital, but has for many years been the dispenser of benefits to large numbers of the poor of Scotland and of Ireland generally. Nevertheless, its resources have been entirely dependent on voluntary contributions, and these mainly derived from the citizens of Edinburgh.

How different the case has been with the Dublin hospitals, for example; all of which receive a yearly contribution from Government. Till recently, this contribution, in the case of the Richmond Hospital alone, amounted to 16,000*l.* The funded wealth of the London hospitals, too, contrasts strikingly with the small capital, too frequently cut in upon, of our Metropolitan Infirmary. We only hope that a better time is coming; and that it will soon appear the duty of Parliament to contribute directly to the prosperity of an institution at once one of the noblest and most useful in this Kingdom. The generous bequeather of the 30,000*l.*—Dr. Paton, of Torryburn, in Fifeshire—has made one curious, but easily attended to, restriction. He appears to have had no very good will to clergymen; at all events, he prohibited the presence of any clerical functionary at his funeral, and decreed that no divine shall at any time take part in the direction of his property and legacies. Hitherto, it has been too much the fashion here for those who have had large sums to bequeath, to order the foundation of a charity and the erection of an hospital which should perpetuate their name,—a practice which savours more of pride than of true generosity. It is partly owing to the existence of this fashion, that we have now, in Edinburgh, to deplore the meagre funds of one single hospital for the sick, while we see hundreds of thousands squandered on the erection of gaudy palaces, in which children are reared and educated away from, and therefore not subject to, required and ordained parental authority. We sincerely hope, that the generous example of Dr. Paton may be extensively followed; and we feel proud, that the example should have been set by a medical man,—the bequeather having been a retired medical officer of the East India Company.

DEATH OF DR. WILLIAM THOMSON, OF GLASGOW.

We have to record the death of Professor William Thomson, of Glasgow, which took place in Edinburgh on the 12th inst. Dr. Thomson was in his 50th year. Since 1848 he had laboured under an affection of the heart, and latterly had suffered from many and severe attacks of bronchitis, and from enlargement of the liver. Dr. Thomson had come to Edinburgh on the 10th, for the purpose of seeing some friends, but became suddenly worse on Tuesday evening, and, after a few hours, expired. Dr. Thomson was the eldest son of the distinguished Professor, John Thomson, and brother to Dr. Allen Thomson, presently Professor of Anatomy in Glasgow. The deceased Professor graduated at Edinburgh in 1824, became a Fellow of the College of Surgeons in 1825, and of the College of Physicians in 1833. Up to 1841, he continued to reside and to practise in Edinburgh; but in that year, on the death of Dr. Badham, he was appointed Professor of the practice of physic in the University of Glasgow. Dr. Thomson was the author of a work on diseases of the liver, published at the time he held the office of physician in the Edinburgh Infirmary. He was also the contributor of various articles to the "Library of Medicine." Dr. Thompson was one of the earliest to describe the spurious melanosis of the lung, or miner's phthisis; and was the author of a very interesting notice of his father's life in the *Edinburgh Medical and Surgical Journal.*

CHAIR OF THE PRACTICE OF PHYSIC IN GLASGOW.

The lamented death of Dr. Thomson has rendered this appointment vacant. As candidates for the chair, we have already heard the names of Dr. Halliday Douglas, Dr. W. T. Gairdner, and Dr. Alexander Wood, of Edinburgh; besides those of Dr. Harvey, of Aberdeen; and of Drs. Andrew Anderson and Ebenezer Watson, of Glasgow. The presentation to this Professorship is in the gift of the Crown.

GENERAL CORRESPONDENCE.

THE LATE EDINBURGH QUARREL.

[To the Editor of the Medical Times and Gazette.]

Sir,—In reference to your editorial remarks on the "Last Edinburgh Quarrel," permit me to put you right on one or two points, as to which you have been either imperfectly or misinformed.

1. I did not originate the report of hæmorrhage; it was current for days before I had even heard of the case at all. 2. My "gossiping" in regard to it consisted of speaking to four medical men; and, in each case, in answer to questions casually put, as to what I knew or believed as to the cause of death. 3. The opinion of Dr. Christison as to the cause of death, was not, and could not have been, a decided one. He at first suspected hæmorrhage; and, having been called but a few hours before the patient's death, only arrived at his ultimate opinion through data afforded by Dr. Simpson. 4. The talk in the Profession as to the case, was not of the nature of "gossip," but respected the large and important question, whether such operations are ever warrantable. 5. The stain of the mattress was not "very trifling;" considerable bleeding is admitted to have occurred; and, consequently, "the report of bleeding is" not "evidently altogether incorrect." 6. I have never met, nor have I been asked to meet, any homœopathic practitioner professionally since the passing of the anti-homœopathic resolutions of the two Colleges. 7. My complaint against Dr. Simpson was, not that he had written disparagingly of me to Dr. Christison, but that he had circulated in the Profession, during several weeks, letters to Dr. Christison, containing charges against me and Dr. Matthews Duncan, not only without any intimation whatever to Dr. Christison, Dr. M. Duncan, or to me, but with care that the document in circulation should not reach the two last named and most interested,—a fact which has not been and cannot be denied. I am, &c. James Miller.

51, Queen-street, Edinburgh.

ON THE CLAIMS OF THE MEDICAL BENEVOLENT COLLEGE TO THE SUPPORT OF THE PROFESSION AND THE PUBLIC.

[To the Editor of the Medical Times and Gazette.]

Sir,—Although I am very unwilling to intrude myself upon the notice of my professional brethren, yet, as it has been intimated to me, that, at the present moment, the interests of what I know to be a most admirable Institution—the Medical Benevolent College—might be promoted by a brief exposition of its claims to professional and general support, I have felt that, in such a cause, no personal scruples ought to be allowed to prevail. With this conviction, I have undertaken to submit a few considerations to the notice of your readers. But, before doing this, it is but due to those whose support it is desired to conciliate, to state, that I have not ventured to make this appeal without having deliberately and carefully investigated the principles upon which this Benevolent Institution is based, the objects proposed to be carried out, and the means by which they are to be realised. The pressure of many engagements, joined, I may add, to the desire of watching the development of the plan when first submitted to the Profession, for some time prevented me taking any active part in the preliminary proceedings. Latterly, I have, as a member of the Council, personally participated in the deliberations of that body, and I have thus acquired a full and complete insight into what it is no misnomer to style a "national undertaking." The principal, and, as I would respectfully submit, the sufficient claim which may be urged on behalf of this Benevolent College to the general support of the Profession, is the comprehensiveness of its character. It secures all the objects that the most enlarged philanthropy could suggest, or that the most varied wants could require. It provides a home for the widow, a retreat for the less fortunate of our professional brethren; and a boon inestimable—a sound, superior education—for the sons of duly-qualified medical practitioners, at a cost so very moderate, as to place it within the reach of the great body of the Profession. It had been the intention, as I am informed, of the gentleman to whom the high merit of originating and vigorously advancing this great scheme is due (Mr. Propert) to provide annuities for the solacing those needing them in declining years,—a point which was only abandoned on the consideration, that such a procedure might seem to trench on the operations of another most admirable Institution. But although for the present no direct pecuniary aid is contemplated, such assistance will indirectly, and in its best form, be administered by the admission of a certain number of "foundation scholars," who will be entirely educated, clothed, and maintained by the College; nor will the elderly inmates be overlooked, inasmuch as the laws give to the Council a discretionary power of making money contributions to the "residents," according to the state of the funds. The Medical Benevolent College affords, in its several departments, a most suitable opportunity, both to individuals and to Societies, to secure the advantages just enumerated to those members of the Profession to whom they would be a welcome boon, since the Council have the power of granting to parties, upon the payment of a certain sum, the right of nominating "residents" and "scholars." When the Institution shall be in actual operation, there can be no doubt that many benevolent individuals, actuated by friendship and philanthropy, will avail themselves of this provision; and, at the present time, several local Medical Societies are, with that object, contemplating the presentation of considerable sums to the funds of the College, in order to expedite its erection.

An Institution embracing so many admirable objects appears to merit the combined and active support of all classes of medical men. Our professional brethren may aid in this goodly work of beneficence, not only by pecuniary contributions, but also by acting in all parts of the country as "local secretaries and treasurers." It is not too much to affirm, that a deep debt is due to the Profession from the public. There is in this community no class which renders so many and such important unpaid services; and is there a family in this kingdom that does not feel they have, perhaps under the most distressing and delicate circumstances, received from their medical attendants benefits which no money could repay? In the midst of pestilence, again, the practitioner of medicine is ever at his post; and how many are the heroes who, in administering to the victims of fever and of cholera, have laid down their own lives an offering to the sufferings of humanity. Many noblemen, prelates, and other distinguished individuals, have already contributed to the funds of the Benevolent College; and, doubtless, their number might be greatly increased by active and judicious exertions.

In conclusion, I would remark, that the success of this Institution may be regarded as secured; the large sum of nearly 10,000*l.* has been obtained; and, mainly owing to the exertions of one individual, a most eligible site for the requisite building is about being conveyed to the trustees. A plan, combining all the most important improvements in construction, has been submitted by the architect; and a most zealous and intelligent Council, after having prepared an excellent code of laws, will watch over the progress and prosperity of the College. In order speedily and fully to realise the great objects contemplated, all that is now required is an earnest and combined effort on the part of all ranks of the Profession; and, when it is recollected, that, in addition to its other philanthropic objects, this is also the cause of the widow and the orphan, we may, in humble reliance on the Divine blessing, confidently anticipate a happy and triumphant result. I am, &c.

Highgate. R. D. Grainger.

TREATMENT OF NÆVUS.

[To the Editor of the Medical Times and Gazette.]

Sir,—Since my letter "On the Treatment of Nævus" appeared in your Journal, I have been made aware, that the subcutaneous ligature for nævus was advocated some time ago by Mr. Curling. The paper to which I would allude is styled, "Observations on the Treatment of Nævi Materni, with Cases of Removal of these Growths from different Parts of the Face without Deformity." It appeared in the *Medical Gazette*, January 26, 1850. Case 2, in this paper, is headed, "Mixed Nævus of Lower Eyelid—Failure of Setons—Cure by Subcutaneous Ligature, without Disfigurement or Loss of Skin." In this case, the author surrounded the base of the tumour subcutaneously, and tightened the ligature by repeated traction. Had I known of this communication, I should probably not have asked for a column of your valuable pages; certainly I should not have done so without, at the same time, making reference to Mr. Curling's paper. I must apologise to you, Sir, and to my friend Mr. Curling, for ignorance on the one hand, and apparent disregard on the other.

Without endeavouring to justify myself, I may be allowed to state, that, in the year 1845, while I was house-surgeon at the London Hospital, I had occasion twice to tie nævi subcutaneously. On both occasions the nævus was small, and the ligature answered admirably. In November of the same year, I made the diagrams, which appeared in your number of last week, for the late Mr. Andrews, of the London Hospital, before I applied, with him, the subcutaneous ligature to a small nævus situated on the face of a child, a patient of Mr. Andrews. This mode of applying the ligature appeared to me to answer the destruction of nævus so perfectly, without interfering with the integrity of the skin,—without, consequently, raising the ugly scar that is necessarily left when the skin is included in the ligature,—that I prepared, at that time, a few lines in recommendation of this subcutaneous treatment of nævus. I was then, however, going abroad, and the communication was allowed to remain in my note-book until the circumstance at St. Mary's Hospital called it forth.—I am, &c.

14, Brook-street, Grosvenor-square. B. E. Brodhurst.

CYST ON THE SCALP OF A NEWLY-BORN CHILD.

[To the Editor of the Medical Times and Gazette.]

Sir,—A short time since I was sent for by a midwife, to see a child just born, and which both she and the nurse were afraid to dress, owing to some irregularity in its formation. On arriving, I found a large bag, composed of the integuments covering the cranium, the base of the tumour extending from the vertex partly down the occiput, and being there about an inch and a half in diameter, but expanding to a circumference of about ten inches; and hanging down the back as far as the scapula, there were two or three slight abrasions, probably produced by its passage through the pelvis, from which there was a slight exudation. I could not ascertain whether it communicated with the interior of the cranium; but, as there was every probability of sloughing taking place, I determined on puncturing the tumour, and obtained from it about two pints of bloody serum, and hoped, by applying pressure, to prevent any further collection in the cyst; however, in two or three days it again filled, and, as there appeared to be a great chance of its bursting, and the child was much emaciated, I proposed to the mother to again evacuate the contents, and that probably it might be removed by operation. This she objected to, and the consequence was, as I anticipated, that the sac burst a day or two afterwards, when the child was brought to me, and, as on minute examination the tumour appeared quite unconnected with the brain or its membranes, I determined on dissecting a flap of integument, and removing the remainder; but, after making the first incision, I found this would be impracticable, as the child was much exhausted by the hæmorrhage that followed; consequently I passed a ligature round the pedicle of the tumour, but owing to the state it was in from having burst, I deemed it necessary to remove the whole mass, (the child at the time being in a most exhausted state,) and afterwards applied cold-water dressing to the surface. On the second day after the operation, on removing the dressing, I was much gratified at finding a healthy surface to the wound about the size of a shilling; the child had somewhat rallied, and I believe if the cyst had been destroyed earlier the child would have lived,—as it was it lingered for nearly three weeks. I see a similar case was presented in 1844, before the Academy of Sciences, by M. Moreau, and that both he and M. Velpeau recommended no operation, but were opposed by MM. Berard and Blandin. In this case the child must have died without the operation.

Gosport. Fred. Lowes.

SULPHURIC ACID IN DIARRHŒA.

[To the Editor of the Medical Times and Gazette.]

Sir,—If you deem the following communication worthy of a place in your able Paper, you will much oblige me by inserting it.

While assisting William Sankey, Esq., of Sutton Valence, one of the many subscribers to the *Medical Times and Gazette*, having seen in its pages correspondence from different medical men relative to the efficacy of sulphuric acid in diarrhœa, and the following cases having come under my care, I determined on testing its therapeutic powers in that disease.

Mary Wbenham, aged 2 years, was brought by her mother to the surgery, suffering from severe diarrhœa and tenesmus, with a copious discharge of blood with each motion, also acute pain when evacuating the contents of the bladder; pressure over the abdomen caused extreme agony. On testing the urine with blue litmus, I found it had a highly acid re-action.

I ordered a mixture of mist. cretâ, with tinc. catech. and opii, and small doses of hyd. c. cret., rhei, and Dover's powder.

Having persisted in this treatment for some days with little, if any benefit to my patient,—the child, hitherto a remarkably fine, healthy-looking one, was now, to use the mother's expression, "falling out of its clothes," and had lost the use of its lower extremities,—as a last resource, (having tried the ordinary astringents, including acet. plumbi, in vain) I prescribed, April 10th—℞ Acid. sulph. dil. ℥iv., syr. simp. ʒj., aquæ ʒss. M. to be taken three times a day.

13th.—Diarrhœa not much lessened; pain slightly abated; not so much blood in the motions. To continue medicine.

15th.—Stools lessened in number; pain much relieved; blood still continues, but reduced to half in quantity.

18th.—Better in every respect; diarrhœa has altogether ceased, as also the blood.

25th.—The child has regained flesh and strength since my last visit; and I am happy to say the little sufferer is now enjoying excellent health.

My second case was that of an old woman suffering from occasional attacks of diarrhœa, which, she states, always leave her in an extremely low, weak condition, and usually continue a fortnight each time. I at once prescribed the acid in scruple doses, and with the most satisfactory results; as, after she had taken a second mixture, she sent to thank me, and returned the bottles; which latter circumstance, I need not inform you, generally indicates, that the doctor has taken his leave.

The third and last case that came under my care occurred in the person of a child attacked with the diarrhœa that so often accompanies dentition.

Without administering any other remedies, I ordered the acid in doses of four minims three times a-day, as in the first case, and in three days the purging ceased.

Remarks.—I am not aware whether any of your readers that have made trial of the acid have observed a peculiar yeast-like appearance of the stools on the third or fourth day after its administration. In the above-mentioned cases I have particularly remarked this occurrence.

I regret, Sir, exceedingly, having taken up so large a space in your valuable columns; but, trusting that the importance of the subject will be sufficient apology, I am, &c.

Sutton Valence. T. E. O'L.

THE ELECTORAL PRIVILEGES(?) UNDER THE NEW CHARTER OF THE ROYAL COLLEGE OF PHYSICIANS.

[To the Editor of the Medical Times and Gazette.]

Sir,—You would much oblige many of your readers by publishing the names of the gentlemen who concocted the new Charter of the College of Physicians. Is it got up by the "Council"? If we knew the men, we should be able to guess what they have been aiming at, for, without some such clue, it is really very puzzling to find it out. Take, as an instance, the limitation of the Presidency to one of the first fifty Fellows. What good can it do to restrict the choice of the College to those who were admitted twenty or thirty years ago? Is it, that the body is so utterly democratic or juvenile, or given to change, that a stand-fast-on-the-old-times gentleman is necessary to ballast the vivacious movements of the College? The "choice of the College," did I say? I ask pardon of the politic concoctors, for attributing to them so shamefully radical and revolutionary a proposal. I ought to have said the choice of the "Council," for the "nomination" of the President rests with that body. The Council consists of sixteen fellows, of whom four only go out of office annually, being re-eligible after being one year out of office. These gentlemen "nominate," and then the (poor) fellows of the Corporation elect. Proxies not allowed, nor travelling expenses to country fellows. All I can make of the matter is this,—that the present snug clique of regents mean to continue their rule under the new Charter. As for the great body of physicians in town and country having an opinion as to whom they would rejoice to place at their head—that the concoctors have never thought of. Would it not be well, that they be reminded such a body really exists, and that the members thereof may possibly be able to decide who is capable of fittingly filling the office of President without the tutorship of the "Council"? They might, *exempli gratiâ*, desire to elect Sir James Clark or Sir Charles Hastings;—but no! those gentlemen would be alike disqualified, not being among the first fifty.

The same principle runs through the whole Charter. The President has the patronage of appointing the "Vice-Presidents," in number four; but he can only appoint from the first fifty fellows—the quinquagesimal squad of sexagenarians—honour to their reverend antiquity! This is cautious, when it is remembered,

that the most juvenile fellow possible must be at least 30—an age when a man may be a bishop, or Prime Minister, or monarch of the realm, or Commander-in-chief, with the most perfect reliance on his steadiness and judgment. With a vigour rather astounding, the Charter gives a little more latitude to the President in the nomination of the "Treasurer" and "Registrar," for his choice is not restricted to the first fifty fellows; but then his nominee has to undergo the chances and mischances of an election by the fellows, which, of course, is a powerful check upon any escapade the venerable, the quinquagesimal-sexagenarian—annually re elected—President may commit. So, also, the Council is not restricted in its nomination of "Censors" to the first fifty fellows; but in this, as at other College elections, it is a special rule (to secure due deliberation), "that proxies shall not be allowed."

I will say nothing about the poor shadowless "members of the College;" the fact being, that such men have no business in the College at all. If they are not fit to take a share in the election of a President nominated out of the first fifty fellows by the Council, are they fit to practise their art?

I am, &c. A JEALOUS QUADRAGENARIAN,
(*Inceptor*) Candidate for the Presidency of the College of Physicians.

GALVANISM.

[To the Editor of the Medical Times and Gazette.]

SIR,—As galvanism is become a fashionable remedy for many complaints of deficient innervation, it seems to me the Faculty should pronounce some judgment on the best mode of using it. I believe we are generally but little acquainted with the practical part of this remedial agent; and I for one wish to seek some information from yourself or correspondents on this subject. The advertising men propound two contrary methods. Some furnishing us with an electro-galvanic apparatus, which gives a series of slight shocks, assert their mode to be the best, and deny the claim set up by those who contend that the shocks do harm and no good; and that they pass an uninterrupted current, scarcely or not at all felt by the patient at the time, but, nevertheless, restorative of impaired function of this or that part. Now, the question I shall be glad to be informed better on is, as to whether the galvanic current can be really affirmed to pass along the nerves for a length of time, in a manner not to be felt, so as to be opening, as these men assert, an obstructed or paralysed nerve track, and, by degrees, make it again patent to its former *vis nervosa*. They also assert, that the shocks interrupt and exhaust the little *vis insita* remaining; while the advocates for the shock contend for its being a salutary stimulant, and that the inappreciable current can neither be said to be a current at all, nor to be anything but an empirical nostrum. Soliciting your notice to my inquiry, I am, &c.

A COUNTRY SUBSCRIBER.

THE INJUSTICE OF THE MONEY-PAYMENTS UNDER THE PROPOSED NEW CHARTER OF THE COLLEGE OF PHYSICIANS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your correspondent, "Medicus Anglicanus," did not point out the gross injustice of the money-demand on the *extra-urbem* licentiates. Some of us have been *quasi*-provincial members of the College for from twenty to thirty-five years, and the accumulated value of our money-payment made on admission cannot be less than from 60*l.* to 80*l.* for each. Further, by far the greater majority of the *extra-urbem* licentiates are British graduates, who procured their diploma solely at the instigation of the College, with an implied, if not an express promise, that their legal position should have a full recognition under any future legislative changes; and this is the mode in which the College would respect the law by which it exists, and its own honour! I am, &c.

AN INDIGNANT EXTRA-URBEM LICENTIATE.

LOOK AT HOME.

[To the Editor of the Medical Times and Gazette.]

SIR,—Under the head of "Look at Home," I have latterly noticed in your valuable Journal certain editorial articles and other communications bearing upon certain points of medical ethics which are well calculated to do good, and it is to be desired that this should be continued as a stereotyped heading to other articles and letters as long as any members of our noble profession shall be found to have recourse to any mean or dishonourable artifices for the purpose of securing practice.

Will you have the kindness to favour your readers with your opinion in reference to the following paragraph, which may be found in a little sixpenny pamphlet, entitled "Disease: its Analysis popularly Described." The writer has described a case of dyspepsia, and adds: "This state of things continued for some months, and, finding that the usual remedies which gave him relief failed one after the other, he called in medical advice, and medicines were prescribed which afforded ease, and freed him in some degree from discomfort; but if the remedies were suspended he relapsed into the same state as before. He soon felt that this was nothing better than a palliative treatment—a 'pottering' system, which brought with it no satisfaction. He could not, however, fathom the true cause of this, which arose from the medical attendant overlooking a very important item in the management of such a case—namely, the rigid scrutiny of the habits and diet of the patient.

"When the patient first applied to me," etc., and then follows the success of the writer's mode of treatment.

The writer of this paragraph is the youngest practitioner in the town, and yet he does not scruple to hold up to the public some older practitioner as a "potterer," and incapable of treating a common case of dyspepsia.

Do you think, Sir, that this is in accordance with strict professional propriety, or that it is calculated really to advance the writer in the estimation of that public for whom it was written? And do you not think that it is likely to injure a young physician, one grand object of whom should be to cultivate the good feeling and respect of his professional brethren? We seldom observe that any great reputation is reached and maintained by persons who do not scruple to sacrifice the reputation of others, and one passage so beautifully apposite occurs to my recollection in "an address delivered before the Dublin Obstetrical Society, by Dr. Montgomery," which I cannot resist the temptation to quote:—"I would fain impress upon you this truth, that the best means ever any man adopted to advance his own interest effectually and permanently, is to be tender of the reputation, and considerate for the interest, of others. There is no surer proof of an honourable mind, and conscious integrity of purpose, than a readiness to construe liberally the acts of others; to make allowances for defects, which, after all, may be only apparent, and to palliate errors in others, as far as that can be done consistently with truth, and a due regard to the welfare of those committed to our care. As, then, we value our own character, we should be tender of that of others. It is surely wretched architecture to attempt to build a reputation on the crumbling remains of that of another. What can be expected of such a structure, but that it will tumble about the ears of the builder, and perhaps bury him in the ruins? Rest assured, that, however secretly or cunningly any one may manage *ambiguas spargere voces*, the uncharitable insinuation will be disclosed; for such things, stone walls have ears, or, to use the language of Solomon, 'A bird of the air shall carry the voice, and that which hath wings shall tell the matter.' Be assured, sooner or later, those who follow this unworthy course will experience the truth of the Persian proverb, which says, that 'Curses are like chickens, and always come to roost at home;' and are not insinuations and detractions some of the worst curses of society? Be assured of this, that the ladder by which you can most certainly and safely mount to a high reputation, 'is the good opinion of your professional brethren.'"

This passage from Dr. Montgomery's address should be printed in gold, and placed in the most prominent place in the study of every medical man in the country; and, above all, should its noble sentiments be indelibly engraved upon the heart of every medical practitioner, and our Profession would indeed and truly be "God-like." I beg to enclose my card. I am, &c.

M.D.

BETHLEM.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your readers may be glad to know, that there are several Asylum appointments quite as good as the one proposed at Bethlem, even in a pecuniary point of view, if the difference of expenditure between London and the country be taken into consideration. Fortunately all counties do not adopt the Middlesex standard of medical remuneration. Ambition might lead many men to try for the Bethlem appointment, but, as you justly observe, few men would submit themselves to the various controlling powers in operation there.

The Board should meet as frequently as business may require;

and no delegation of authority to individual members thereof, or to Sub-committees, should be permitted.

The Superintendent should have a seat at the Board (without a vote) secured to him by the Rules. I have, and the only authority I feel myself bound to obey is, the opinion of the majority of the Board, duly expressed and recorded in a Minute.

Without this understanding a public officer may be worried to death by meddlesome Committeemen; with it, he may generally lead his Committee in the right direction, for, after all, public Boards consist of a majority of gentlemen.

I am, &c. A County Superintendent.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

John Bishop, Esq., F.R.S., President, in the chair.

OPERATIONS FOR OVARIAN DROPSY.

Mr. I. Baker Brown made some observations on two operations which he had lately performed for the cure of ovarian dropsy. These operations were somewhat novel, inasmuch as they exhibited ovariotomy in a modified form, and offered some pathological considerations of great moment in a practical point of view. Mr. I. B. Brown stated, that he had lately operated on a patient in St. Mary's Hospital, by excising a portion of the cyst, and returning the remaining portion within the peritonæum, and then closing the wound by sutures, leaving the fluid that might be secreted by the partial cyst to be absorbed by the peritonæum. This patient was convalescent in a fortnight, and would leave the hospital within a month from the date of the operation. The second case offered difficulties which ended in complete extirpation; this case, however, was doing well. Mr. Brown stated, that he should, with the permission of the Council, read a paper on the subject before the Society in May next, and therefore should not now dwell further on these cases.

LIGATURE OF THE EXTERNAL ILIAC ARTERY.

Mr. H. Smith exhibited to the Society a patient upon whom he had performed the operation of tying the external iliac artery on the left side, and the superficial femoral of the opposite limb. The external iliac had been tied a year and a half ago, for aneurism, high up in the thigh. The patient had remained well until the beginning of the present year, when an aneurism of the popliteal artery had appeared. For this the ligature was placed upon the superficial femoral artery two months since. The patient was now quite well, and was about to return to his work. Mr. Smith stated, that he had shown the patient to the Society, as it was a very rare thing to meet with a case where both vessels had been successfully ligatured on the same individual. There was one point of special interest connected with the first operation, to which he drew the attention of the Fellows. Some months after the iliac artery had been tied, a considerable protrusion had taken place, so that it was necessary for the patient to wear a truss; but, since he had been laid up to undergo the second operation, the hernia had disappeared, and did not present itself when the patient coughed. Nevertheless, for the purpose of obviating the chance of its recurrence, he had advised the man to continue wearing his truss.

Mr. Borlase Childs desired to ask Mr. Smith whether compression had been tried before the ligature was applied on either vessel; and, if not, why was it not tried?

Mr. Smith stated, that he had put the question fairly to the patient, as to whether he would have compression tried first or not, he having made up his mind to employ it if the patient desired it; but the man decided on having the ligature applied upon the external iliac at once. With respect to the second operation, he had advised the man to undergo the same process in reference to the femoral artery as he had done with regard to the external iliac, as he had so rapidly and effectually recovered from the first operation, and he had every reason to suppose that there would be the same success in this instance.

Dr. Crisp exhibited three specimens of

PERFORATION OF THE STOMACH.

The patients were all young women. Two stomachs were also shown, which demonstrated the *post-mortem* effects of the gastric juice. In one of these a large aperture was formed. Another specimen of perforation of the colon from dysentery was also exhibited. Dr. Crisp said, that his chief object in bringing these preparations before the Society was in relation to the discussion that took place after Mr. Leonard's paper. The contrast between the perforations from the *post-mortem* action of the gastric juice and from simple ulceration during life, was very marked. In the former, the aperture was larger, and its edges flocculent and woolly, the mucous coat being destroyed to a much greater extent than the peritonæal. In the latter, the opening was generally small, with well-defined edges. A drawing, showing the size of the last-mentioned perforations, in numerous cases, was placed before the Society. Dr. Crisp said, that the opinion he was the first to express at that Society, fifteen years ago, respecting the occurrence of these perforations in young women, and their dependence upon uterine derangement, had been fully verified by subsequent investigation. He differed from Mr. Leonard in many of his conclusions, more especially in the statement that the subjects of these perforations presented a healthy appearance. They were generally pale and chlorotic. He had never seen the sloughy state of the peritonæal coat, nor the ragged condition of this membrane alluded to by two of the speakers in the recent debate upon the subject.

Mr. Bullock exhibited a specimen of diseased bladder and kidneys, taken from a patient of Mr. Lane's, in St. Mary's Hospital, admitted March 23. He was a man 42 years of age, whose history was, that, while hunting fourteen years ago, he was thrown on to the pommel of the saddle, passing afterwards blood in his urine, and having cutting pain on making water, with more or less difficulty for seven years, when he had retention; this was relieved by catheters, and, subsequently, bougies were passed for a short time; he again had retention at the beginning of March, and has since had instruments passed up to a few days of his admission. When he applied to the hospital he complained of great pain in the pubic region and in the perinæum, and stated that he had not passed water for some hours. On attempting to pass an instrument great pain was caused; the attempt was therefore given up, and he was given a warm bath and an opiate; some urine passed in the bath. On the next day, a No. 3 wax bougie was passed without much difficulty, but the urethra appeared rather rough. The pain continued; a quantity of gelatinous-looking mucus passed on withdrawing the bougie; there was blood in the urine, which was consequently albuminous; he was given mercurial alkalies and leeches without any permanent benefit. On the morning of the fourth day, a small phosphatic calculus suddenly shot out into the urethra, about two and a half inches from the orifice; this was extracted by urethral forceps, with immediate relief; a quantity of mucus and some urine followed. The next day, however, the pain returned; more blood passed in his urine, and in the course of three or four days a swelling appeared in the perinæum: this was opened, and thick mucus evacuated; there was a little hæmorrhage. He gradually sank, and died on the 6th of April. Both kidneys were granular, large, and greatly injected; the right ureter contained about ʒij. of albuminous urine. At its termination in the bladder its coats were thickened, and the mucous membrane ulcerated for about one and a half inches. The walls of the bladder were greatly thickened; there were several small abscesses in its substance; the membranous, bulbous, and part of the spongy portion of the urethra for about three inches were ulcerated, and had a small communication with the wound in the perinæum, about two inches and a half from the orifice. About half an inch of the urethra was coated with lymph, which was intimately adherent to the mucous membrane.

ON THE NATURE AND TREATMENT OF EPILEPSY.

Dr. Radcliffe then read a paper on this subject. He first drew attention to the temperament of epileptics, and showed that this was distinguished by unequivocal marks of weakness and depression; signs of scrofula or some other cachectic disposition, of depressed and feeble circulation, of defective nervous activity, of muscular feebleness, might always be detected, but never the signs of true plethora or of hyper-activity in the nervous or any other system. When epilepsy had shown itself in persons distinguished by their genius and talent, it was in the state of exhaustion induced by the exercise of that genius or talent; when it was associated with insanity, the convulsive disorder coincided with the intervals of depression, and never with the periods of *quasi*-excitement. After describing the phenomena of epilepsy, he proceeded to point out the continuance of the same signs of depression and exhaustion, and to show that the change which had taken place was always one of aggravated depression and exhaustion. This he did by a special examination of the condition of the vascular and nervous systems. Immediately before and after the fit the pulse was shown to be weak and collapsed, and often irregular and slow, and, in the fit itself, little or no blood was found to be propelled into the vessels. This condition of the circulating system entailed a corresponding failure in the activity of the several nervous centres. He argued, also, that the brain was inactive, because the epileptic was silent, sad,

moody, and generally still, before his seizure; completely bereft of sensibility, consciousness, and volition in his seizure; and stupid, confused, and exhausted afterwards. He argued, also, from the true appearances found after death. He noticed the views of Dr. Davey and Dr. Henry Monro in connexion with insanity, as corroborating this conclusion. He advanced arguments to show that the medulla oblongata, spinal cord, and the smaller ganglionic centres, were in a corresponding state of inactivity. Dr. Radcliffe then insisted upon the absence of any local disorder as a cause of epilepsy, and said, that the only way in which any such disorder had to do with the matter, was in aggravating the general debility and prostration of the system. Under this head he went on to notice the views of Dr. Marshall Hall. He contended, that in epilepsy there was no proof whatever of any increased irritation in the spinal cord, any more than in the medulla oblongata and brain, but that there were abundance of proofs of a directly opposite condition. He doubted that trachelismus and laryngismus, with the consequent cranial and cervical engorgement, had any necessary connexion with epilepsy. He did this because there were distinct contractions in the limbs and elsewhere, before the occurrence of the spasmodic tightening of the muscles of the neck and larynx, and because the fit ceases when the congestion was at its height—so that he conceived Dr. Hall's theory had two insuperable difficulties to contend with,—the one that the fit had actually begun before it ought, (that is to say, before the congestion had shown itself,) the other that it ceased when it ought to have been most violent, (that is, when the congestion was at its height.) He (Dr. Radcliffe) argued, also, against the hypothesis of trachelismus and laryngismus, from its non-applicability to very many cases of epilepsy, in which cases, and in many other convulsive disorders, no such phenomena could be detected. He said, further, that this hypothesis did not account for the insensibility of epilepsy, for, in his opinion, this insensibility (which was much more frequently of the nature of syncope than coma) was, as a general rule, due to a syncopal condition of the circulation rather than to any venous congestion in the vessels of the brain produced by the spasmodic tightening of the muscles of the neck. The mere violence of the muscular contractions or convulsions in epilepsy, Dr. Radcliffe said, was no objection to the existence of the most positive prostration and depression; on the contrary, this very phenomenon was the best proof of the existence of that state. Muscular contraction, physiologically, as well as pathologically, was always (he asserted) the sign of some withdrawal of the nervous and other stimuli which appertain to the muscles, and never the result of the communication or importation of these stimuli, and for the confirmation of this opinion he referred to his published views on muscular physiology and pathology, and to the facts which had just been stated in connexion with epilepsy. Upon the treatment, he argued at some length against low diet, and in favour of the most nutritious food, with stimulant and corroborative drinks, and against over-exercise in favour of rest. Citing many other arguments, he conceived that the non-existence of vascular or nervous excitement, and the existence of a directly opposite condition, was itself an insuperable objection to bleeding and purging in this malady, and an argument for the necessity of stimulants and tonics, and all means which could corroborate the system. Narcotics, counter-irritants, and emetics were condemned. The convulsion-exciting properties of strychnia were stated to be an argument against, rather than in favour of, that drug. He objected, also, to tracheotomy in the cure of epilepsy, on the ground, that there were many cases of that malady in which the larynx was not sensibly affected, and in which the impediment to the respiration was rather owing to irregular action or spasmodic fixation in the thoracic muscles and diaphragm, than to mere closure of the larynx.

MEDICAL NEWS.

Medical Benevolent Fund.—The Anniversary Dinner of this Institution took place at the London Tavern, on Thursday last, the Earl of Carlisle presiding. We were gratified to witness a very full attendance on the occasion, and among those present may be mentioned:—Sir James Clark, Sir Charles Hastings, Dr. Forbes, Dr. Sylvester, of Clapham; Dr. Browne, of Dumfries; Dr. Burrows, Mr. Propert, Mr. Erasmus Wilson, Dr. Radcliffe, Mr. C. R. Hall, of Torquay; Mr. Edwin Saunders, Dr. Conolly, of Hanwell; Dr. Bright, Dr. Cowan, of Reading; Dr. Walter Lewis; Mr. Solly; Mr. Sankey, of Dover; Mr. Bottomley, of Croydon; Mr. Toynbee; Mr. Curling; Dr. R. Bennett; Mr. George Sampson; Mr. Squibb; Mr. South; Mr. Day, of Isleworth; Dr. Bushman; Mr. Lord, of Hampstead; Dr. Begley; Mr. Newnham, of Fareham; Dr. Daniell, of Newport Pagnell; Mr. John Churchill; Dr. Barclay; Dr. Sibson; Mr. G. N. Palmer; Dr. Seymour, of St. George's Hospital; Mr. Clement, of Shrewsbury; Mr. Lowdell, of Brighton; Dr. Jenks, of Brighton; Mr. Hunt; Mr. Bird; Mr. Norman, of Bath; Mr. Eyles, &c. &c. The dinner, as usual at this establishment, was excellent, and was musically enlivened by the talented performances of the following vocalists, under the direction of Mr. Ransford:—Miss Eyles, Miss Ransford, Mr. Holmes, Mr. W. E. Ransford. After the usual loyal toasts, the noble Chairman, in an eloquent speech, proposed, "Prosperity to the Medical Benevolent Fund," coupling with the toast the name of Mr. Newnham. Mr. Newnham having returned thanks, "The Royal Colleges of Physicians and Surgeons" were next severally proposed, and followed by other toasts. The contributions announced amounted to a considerable sum, of which we shall give particulars in our next, together with a more detailed account of the proceedings.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 14th inst.:—

Beddome, Henry Septimus, Hudson's Bay, North America.
Clarke, Richard, Beccles, Suffolk.
Drinkwater, James Pratchett, Shrewsbury, Shropshire.
Gurney, Richard Anthony F., Lilburn, Northamptonshire.
Hanna, Harrison, Belfast.
Hildege, James Graham, Dublin.
Lambert, George Prowd, Enfield, Middlesex.
Lucas, Robert, Bottisham, Cambridgeshire.
Mugliston, George Thomas William, Westham, Essex.
Shepherd, William A., Hon. East India Company's Service.
Sowerby, Thomas, Loughborough, Leicestershire.
Wadsworth, Godfrey B., Warwick-street, Regent-street.

At the same meeting of the Court, Messrs. Augustus Richard Richard Preston and Richard Jago Squire passed their examinations for Naval Surgeons; these gentlemen had previously been admitted members of the College, their diplomas bearing date, respectively, February 20, 1846, and July 17, 1846.

The College Lectures.—Professor Paget brings his interesting course of lectures, on Malignant Tumours, to a close this day (Saturday).

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 13, 1852:—

Ball, Tertius, Liverpool.
Balding, Daniel Barley, Barkway, Herts.
Brown, Alexander, E.I.C.S, Steeple Bumpsted, Essex.
Hemingway, Edward Vavasour, Leeds.
Lankester, Henry, Poole, Dorset.
Manley, John, Hurst-green, Sussex.
Ogilvie, William Mackay, R.N., Boughton Blean, Kent.

Obituary.—On the 6th ultimo, at Cairo, from the effects of a sunstroke, received four days previously, Charles Evans, Esq., late of Margate, surgeon, in his 39th year. On the 8th instant, at King Haithe-square, Lynn, Edward Manby, Esq., surgeon, formerly of East Reedham, Norfolk, aged 69. On the 13th instant, at his residence, the Lodge, Bedford, Nicholas Fitzpatrick, M.D., late of the Royal Artillery. On the 15th inst., in Hanover-street, London, in the 80th year of his age, William Winstanley, M.D., of West Cliff, Preston, one of Her Majesty's justices of the peace for the county of Lancaster.

Medical Appointments and Vacancies.—A resident surgeon apothecary is required at the Marylebone workhouse. Candidates must possess the double qualification; salary 150*l.* a-year, with board, lodging, and washing. Testimonials to be sent in on or before the 24th. Candidates admitted on the 26th. The apartments not suitable for a married man. At the Staffordshire General Infirmary a house surgeon and secretary wanted, Mr. Masfen having resigned. The double qualification required; salary 100*l.* a year, with coals, gas, washing, and furnished apartments. Board at the matron's table. Testimonials to be sent in or before the 2nd of June. Duties to commence at Midsummer.

Dr. G. Robert Rowe, of Cavendish-Square, has been appointed Physician to the East of England Life Insurance Company, (a Medical Managing Officer.)

Dr. Paris, President of the Royal College of Physicians, had an interview, on the 17th inst., with Mr. Secretary Walpole, at the Home Office, to present the annual Report of the National Vaccine Board.

Military Appointments.—93rd Foot: Staff-Surgeon of the 2nd class John Ramsay Brush, M.D., to be surgeon, vice Sall, who exchanges. Hospital Staff: Surgeon William Sall, M.D., from the 93rd foot, to be staff-surgeon of the 2nd class, vice Brush, who exchanges.

The Militia.—The House of Commons, on Monday night, resolved, by a majority of 90, that medical men should not be exempt from serving in the militia. By a preceding resolution, they exempted Peers. Surely, the authorities of the Colleges of Physicians and Surgeons have influence enough, at least in the Upper House, to cause the withdrawal of this most unjust and injurious resolution.

Charity for Hospital Purposes.—The Right Hon. L. Sulivan, and the Rev. J. H. Fisk, have each presented the sum of 50*l.* to the Charing-cross Hospital; and the Duke of Buccleuch has given 25*l.* to the same hospital. Mrs. Droop has given 30 guineas, and Mr. Wilson, 21*l.* to the Hospital for Children, to which Captain Gladstone, of the Royal Navy, has also contributed 10*l.*

In March, 1405 persons died in Bombay out of a population of a quarter of a million—171 from cholera. Eleven Europeans were cut off during the month.

Progress of Epidemics.—The yellow fever still prevails at Rio, the mortality being principally confined to the shipping. At Pernambuco, where the fever had partially subsided, it has returned with greater virulence, and some fatal cases have occurred in the city. In consequence of the existence of fever at these places, the Severn, mail-steamer, was placed in quarantine at Teneriffe, Madeira, and Lisbon. Four deaths occurred on board, but it is not stated those deaths were or were not occasioned by the yellow fever. At Lisbon, the passengers, 100 in number, were sent to the Lazaretto for eight days. The troops in Hong-Kong continue healthy, though the weather has been very unfavourable, and generally the colony is much freed from the late epidemic of small-pox. Dublin is reported to be suffering severely from a malignant fever. On this subject Mr. Reynolds put a question to the Chief Secretary for Ireland, in the House of Commons, the other night, as to what arrangements had been made to afford additional hospital accommodation to the sick poor; and he also inquired whether it were the intention of the Government to reduce the annual grants to the Cork-street Fever Hospital, and to other charitable hospitals in Dublin. He added, that he believed that malignant fever was increasing to such an extent in that city as to render the present hospital accommodation altogether insufficient. Lord Naas replied that, from the accounts he had received, he had great hopes that the prevalence of fever was somewhat on the decrease in Dublin. At all events, full and perfect hospital accommodation would be provided for all the poor who were attacked. With regard to the other question, the votes for the Dublin hospitals would be proposed in accordance with the estimates on the table. There the matter dropped; but we must express our hope, if the fever should increase and become an epidemic, requiring the establishment of special hospitals, that the remuneration of the medical officers will not be on the same scanty, insufficient, and paltry scale as heretofore.

[Advertisement.] — New Equitable Life Assurance Company.—Chief Offices, 449, West Strand, London. In consequence of several false and calumnious allegations which have been circulated respecting the proceedings of this Company, the Directors think it right to publish the following statement:—1st. That Dr. Robert Lee, F.R.S., has not resigned either the office of Chairman or that of Director. 2nd. That George Beaman, Esq., Vice Chairman, has not resigned either the office of Vice Chairman, or that of Director. 3rd. That since the business of the Company commenced, not a single Director has resigned, and that all the members of the Board, individually and collectively, are employing their utmost energies to promote the success of a Life Assurance Company which duly recognises the rights and valuable services of the Medical Profession. 4th. That the salaries of all the officers and clerks of the Company have been regulated with a strict regard to the duties to be performed, and an economical application of the funds of the Company. 5th. That not any Director is secured or awarded by the deed of settlement, nor by any other deed or document, an annuity of 1200*l.*, a gratuity of 1200*l.*, nor any gratuity or pension whatsoever. 6th. That the founder of the Company occupies only the same position in the deed of settlement as any other Director, and that it is not provided by the deed or any other instrument that he shall receive one shilling more than is to be paid to any other Director. That he has never made a charge for any personal expense incurred by him, nor for the time bestowed on his endeavours, continued for nearly a whole year in getting the Company registered. That he has received nothing for these services, and has declared that he will receive nothing beyond the unanimous vote of thanks awarded to him by the Directors, and policy and shareholders at the Annual General Meeting—an honour then gratefully acknowledged. 7th. That the balance-sheet, published pursuant to the Act of Parliament, on the 31st December, 1851, which shows the premiums up to that date; and the Report, dated 31st January, 1852, which shows the premiums up to that time, are both strictly and accurately correct, as may be seen by any policy or shareholder, who will take the trouble of inspecting the books. 9th. That, since the 31st December, 1851, the annual premiums on new policies have been, up to the 30th April, 1852, 3976*l.* 13s. 1d., making a total of premiums on new policies up to the last-mentioned date of 7459*l.* 18s. 10d., in a period of fifteen months, an amount of business which has naturally provoked much envy and misrepresentation. The Directors take no credit to themselves for what has been done, further than for propounding the principles which are characteristic of the constitution of the New Equitable Life Assurance Company. On the contrary, they cheerfully acknowledge, that the extraordinary success of the Company is attributable to the exertions and support of the members of the Medical Profession, who at once discovered both the elements of retribution and of justice in the Charter of the new Institution. —By order of the Board, John Thompson, Secretary, 15th May, 1852.

Mortality Notabilia.—The mortality of the Metropolis of last week exhibits a considerable increase on that of the preceding week. In the week that ended 8th May, the deaths fell to 972; in the week ending last Saturday, they rose to 1070. In the ten corresponding weeks of 1842-51, the average number of deaths was 907, which, if raised in proportion to increase of population, becomes 998. The deaths of last week, therefore, exceed the estimated amount by 72. Compared with the facts of the previous week, the present return discovers an increase in deaths caused by epidemics from 193 to 234, while in those from diseases of the respiratory organs the numbers are almost identical. There is an increase from 130 to 142 in deaths by phthisis. Diseases of the heart also rose in the two weeks from 37 to 45; those of the digestive organs from 60 to 74. Among epidemics the increase arises chiefly from small-pox, and in the next place from scarlatina. Zymoties in the aggregate produce at present considerably more than the average mortality of the season.

DEATHS *in the Metropolis for the week ending Saturday, May* 15, 1852.

Causes of Death.	May 15. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	503	365	198	1070	9073
Specified Causes	500	365	197	1063	9017
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	178	47	9	234	1743
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	1	24	21	46	471
3. Tubercular Diseases	73	117	10	200	1945
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	55	41	25	121	1145
5. Diseases of the Heart and Blood-vessels	4	21	20	45	301
6. Diseases of the Lungs and of the other Organs of Respiration ...	79	48	42	169	1288
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	29	31	14	74	574
8. Diseases of the Kidneys, &c. ...	...	5	3	8	90
9. Childbirth, Diseases of the Uterus ...	...	9	2	11	80
10. Rheumatism, Diseases of the Bones, Joints, &c.	4	2	...	6	73
11. Diseases of the Skin, Cellular Tissue, &c.	1	...	1	2	11
12. Malformations	1	...	...	1	30
13. Premature Birth and Debility ...	32	1	...	33	220
14. Atrophy	29	1	...	30	138
15. Age	...	...	46	46	487
16. Sudden	...	1	1	3	107
17. Violence, Privation, Cold, and Intemperance	14	17	3	34	314
Causes not Specified	3	...	1	7	56

ORIGINAL LECTURES.

LECTURES

ON

THE PATHOLOGY AND DIAGNOSIS OF RENAL DISEASES;

BEING THE GULSTONIAN LECTURES.

DELIVERED AT

The Royal College of Physicians,

By GEORGE JOHNSON, M.D. Lond.

Fellow of the Royal College of Physicians, and Assistant-Physician to King's College Hospital.

(Concluded from page 154.)

Lecture III.

In two previous lectures I have given the pathological history of a form of renal disease which is characterised by a desquamation of epithelium from the uriniferous tubes, the object of the desquamative process being, as I have endeavoured to prove, the elimination of some abnormal products from the blood. To-day I have to speak of a disease, the most remarkable feature of which, is the absence of that desquamation which is characteristic of the first-mentioned malady. One of the best illustrations of the acute form of what I propose to call the non-desquamative disease, was afforded by the subject of the following case, for the notes of which, as well as for the opportunity of examining the urine and the kidney, I have to thank my friend Dr. Henry Monckton.

John Ager, aged 18, was admitted into the Dreadnought Hospital on the 1st January, 1850, with rheumatic fever. In the month of March he was convalescent, taking tonics, walking about, and reporting himself every day stronger and better. On the morning of the 15th March, while he was still up and dressed, he first directed attention to his legs, which were much swollen, as was also the scrotum. He was ordered to bed, and directed to keep his water, which he said was scanty and high-coloured. In the evening of the same day, he was much worse, having been seized with urgent dyspnœa, after eating a chop, and making rather a sumptuous and rapid meal at tea time. The anasarcous swelling had much increased, and the abdomen was distended. He had passed no water. An emetic of sulphate of zinc was given—a mustard poultice to the cardiac region, and the feet were placed in hot water. He soon became much easier, and being propped up in the upright position he fell asleep.

On the following morning, the 16th, the breathing was much easier; but wheezing sounds were heard over both lungs. The bowels had been freely opened, and the small quantity of urine secreted had been passed with the motions, so that none could then be obtained for examination.

The next day, the 17th, he was much the same; but, in the night following, he was seized with another fit of most urgent dyspnœa, so that life seemed instantly threatened. He was somewhat relieved by the same treatment as on the former occasion; but he could not sleep, and, on the following morning, he was still much distressed, unable to speak, and his features pallid and pinched. He was evidently weaker; pulse 130; loud wheezing sounds were heard over the chest. Some urine now obtained had a sp. gr. 1028, and formed an almost solid coagulum with nitric acid.

On the 19th of March, it was reported, that he had passed no urine since yesterday at noon; his countenance was anxious, and very pallid; pulse very irregular and weak; respiration, 48.

He gradually sank, without any increase of dyspnœa, and died about 10 p.m., within five days from the time when the dropsical symptoms were first observed.

The body was examined sixteen hours after death. The cellular tissue was everywhere loaded with serum; the face puffed; and the abdomen full.

The pleuræ contained recently-effused lymph and serum.

The lungs were in a state of engorgement, approaching to hepatization.

The heart was of moderate size, and all its valves were healthy.

The abdominal cavity contained much serum, and flakes of lymph.

A small quantity of urine, and a portion of one kidney, were sent to me for examination. The urine had a specific gravity of 1028. On the addition of nitric acid, it became almost solid with albumen. It was somewhat dark-coloured, but nearly clear, and free from cloudiness. After standing, it deposited some crystals of lithic acid, but no casts of tubes, epithelium, or blood corpuscles.

The cortical substance of the kidney was pale; the tubes were abnormally opaque, and had a yellowish tinge,—an appearance resulting from the condition of the epithelium, which was unusually opaque and granular—a departure from the normal condition very difficult to describe, though quite easily recognised. In only a very few tubes was there any appearance of a crowding of epithelium, the result of desquamation. The Malpighian capillaries presented the appearances so constantly observed when, during life, the serum of the blood has transuded through them. The walls of these vessels were opaque, and apparently thickened, so that the blood corpuscles within them appeared colourless and magnified.

A few months before I met with the case the history of which I have just now given, I had examined the kidneys of two patients, of whose history I knew little more than that they died from suppression of urine; and in both instances the kidneys presented the same appearances as were observed in the case of Ager.

These cases were the first by which my attention was particularly directed to that remarkable concurrence of phenomena which I have just now described, namely, a very scanty secretion of highly-albuminous urine, containing scarcely a trace of renal epithelium or of tube-casts,—urgent symptoms of suppressed secretion, often terminating fatally, and thus affording the opportunity of observing that there is nothing in the mere morbid anatomy of the kidney to explain the fatal consequences of the attack.

In order to arrive at the true interpretation of this form of disease, we must again advert to the phenomena of desquamative nephritis.

I have endeavoured to prove, that the abundant shedding of epithelium, which characterises that form of renal disease, is the result of a salutary effort to eliminate from the blood some abnormal products, the retention of which would doubtless lead to injurious consequences, while their ready escape from the blood is probably favoured by the free shedding of the epithelial cells, as the elimination of the scarlatina poison is effected by the desquamation which it excites on the surface of the skin. A consideration of these phenomena suggests the probability, that, in the event of there being conveyed by the blood to the kidney, any of those abnormal materials which are usually eliminated by means of the desquamative process, the *non*-occurrence of epithelial desquamation would be an unfavourable circumstance. The absence of desquamation in such instances is perhaps analogous to those cases of the exanthemata, in which the eruption is either entirely absent, or very imperfectly developed; and this depending not, as it appears, upon the blood being infected by a mild dose of the morbid poison, but upon some failure in the effort to eliminate it by means of the cutaneous eruption; the symptoms of blood-poisoning being, meanwhile, very urgent, and often quickly fatal. Instances of such an occurrence may occasionally be seen in the case of small-pox; and the case which I quoted in my last lecture from Sir B. Brodie, affords an illustration of what we may perhaps call an abortive carbuncle. Again: it has frequently been observed, that the most rapidly fatal cases of cholera are those in which there is either no purging, or a very scanty secretion from the bowels; the patients quickly sinking either from an excessive dose of the poison, or in consequence of some failure and imperfection in the effort to eliminate it.

With reference to all the instances which I have adduced for the sake of illustration, it is important to distinguish between the essentially beneficial tendency of the primary morbid phenomena and the secondary consequences, which may be injurious and even fatal. Thus, in a former lecture, I alluded to the fact, that an abundant desquamation of epithelium may so fill and obstruct the uriniferous tubes as to arrest the process of secretion within them. A copious eruption of small-pox pustules may destroy the patient by the excessive irritation and the exhausting discharges which they induce; and the abundant discharges produced by the cholera poison will so effectually drain away the watery portion of the blood as to destroy the life of the patient; and yet, in each of these instances, consequences more

speedy in their occurrence, and not less serious, would result from the absence of those pathological phenomena which a superficial observer might erroneously consider to be the essence of the diseases referred to.

A careful study of these and other allied phenomena, will show the importance of distinguishing the primary and essential cause of a disease from those outward and visible manifestations of it, which are in many instances the means adopted by nature for the removal of the evil, or for obviating its injurious effects. The distinction is not more important for the purposes of exact pathology than as being an essential condition for the correct and rational treatment of disease. It is evident, for instance, that the notion of scarlatina being primarily and essentially an inflammation of the skin, without reference to the condition of the blood or the designed end of the cutaneous eruption, would be a great error in pathology, and, applied to practice, would lead to serious, and even fatal results. The cutaneous heat and redness might be speedily removed by the influence of cold, but injurious consequences would certainly result from the suppression of the eruption.

Before I had learned to recognise this non-desquamative condition of the kidney, and to give to it what now appears to be the true interpretation, I had, on several occasions, based a favourable prognosis upon the idea, that when the urine, though scanty and highly albuminous, is free from sediment, and contains neither casts of tubes nor renal epithelium, the kidney is in a state of simple congestion or of functional disturbance, and therefore favourable for the patient's recovery. It was only after repeated disappointments, and painful proofs that I had sometimes given a too favourable prognosis, that I succeeded in separating the large proportion of error from the element of truth contained in the idea referred to.

From what has already been said, it will be apparent, that the absence of desquamation is the characteristic feature of the condition of kidney now under consideration. The diagnosis of such cases during life must be based partly upon positive, and partly upon negative evidence. To the first kind belongs the fact of a scanty secretion of highly albuminous urine, the colour of which is nearly normal, or perhaps somewhat darker and less transparent than usual; while evidence of a negative kind is derived from the observation, that the urine contains neither renal epithelium nor casts of the tubes. The absence of tube-casts is, however, not constant, for in certain cases, which I believe to be essentially of the same kind, as indicated by the absence of all signs of desquamation, the urine contains a peculiar form of tube-cast, the observation of which will assist in the formation of a correct diagnosis.

I believe that I shall best succeed in elucidating this point, by giving the history of a characteristic case, with the addition of such comment as is necessary to render the case intelligible.

George Henry Lewis, aged 45, of intemperate habits, had latterly been much reduced in circumstances, and had suffered from mental anxiety and an insufficiency of food: was admitted into the hospital under the care of Dr. Budd, on the 6th June, 1849. He was suffering from general anasarca and ascites in a great degree, and his body was covered with an ecthymatous eruption. He was very pallid, his breathing was difficult, and accompanied by a wheezing sound. His condition was altogether very pitiable. The dropsy had appeared a fortnight before his admission, and the eruption a month earlier. The sounds of the heart were normal.

The urine was scanty, rather light coloured, somewhat cloudy, of specific gravity 1012, becoming almost solid with albumen when boiled. After standing it deposited a pretty abundant whitish dense precipitate, chiefly composed of small transparent waxy casts, about one-thousandth of an inch in diameter, with scarcely any epithelial cells, and few, if any, blood corpuscles.

He was first put on milk diet, had a tepid bath every morning, and small doses of citrate of ammonia, with fifteen minims of ipecacuanha wine every six hours. He began to improve almost immediately.

It may be well to mention here, that for several years he had been subject to epileptic fits, one of the consequences, probably, of his extreme intemperance. During the continuance of the dropsy the fits returned with increased frequency, and he suffered much from headache.

The urine was frequently examined, and its condition was carefully noted. For a short time after his admission, he passed only 16 ounces of urine in 24 hours, but the secretion soon became much more abundant; and on the 18th June, for instance, it was 80 ounces, having a specific gravity of 1012. The casts continued to have the same character, but, after a time, some had a finely granular appearance,—a consequence, probably, of their having remained in the tubes until the fibrinous material of which they were composed had become disintegrated. In some examinations there appeared a considerable number of blood-corpuscles; but on every occasion it was noted that there was scarcely any epithelium. On the 25th June it was first observed that some of the casts entangled a few oil-globules, and here and there appeared a cell containing oil. These appearances continued for about three weeks, and occasioned some anxiety lest the kidneys should undergo fatty degeneration. About the middle of July it became evident that the oil was diminishing, and the casts were less numerous, but the albumen was still abundant.

On the 26th July the albumen was reported to be much less, and all trace of the casts had disappeared. The eruption and the dropsy were gone, his appetite and strength had returned, and the pallor of his face had been replaced by a healthy hue. He had been taking steel since the 26th June.

On the 30th July he was improving in every respect, and the urine was *scarcely* albuminous.

On the 1st August he left the hospital without permission, and did not return. The object of his sudden departure, probably, was to indulge his morbid appetite for intoxicating liquids, from which he could scarcely be restrained even while he was in the hospital. It would have been satisfactory to have kept him under observation a few days longer, until the albumen had quite disappeared; but the improvement had been so rapid and continuous, and the quantity of albumen, at the last examination, was so minute, that the case may fairly be considered a cure.

The most remarkable feature in the microscopical characters of the urine in this case, was the peculiar appearance of the casts and their small diameter as compared with that of the large waxy casts to which I have before alluded as occurring in the advanced stages of the chronic desquamative disease. It is evident, that, as the large waxy casts which have the full diameter of the uriniferous tubes must have been moulded in tubes from which the epithelial lining had been previously removed, so the size of the small casts afforded decisive evidence that the tubes from which they had come still retained their epithelial lining. Relying upon this favourable indication, I ventured to suggest to Dr. Budd, when Lewis first came under observation, that his patient would probably recover. My prediction was verified by the result; but I have since discovered that one opinion which I then entertained, and upon which my favourable prognosis in that case was partly based, was, in fact, an erroneous one. I supposed, that the absence of desquamation was an indication that the secreting cells were not involved in the disease; and I inferred, that the blood was in such a morbid state as produced congestion of the Malpighian capillaries, while it affected but slightly, if at all, the epithelium of the kidney.

A reference to the history of the case will show, that the great degree of dropsy, the increased frequency of the epileptic fits, and the other consequences of suppressed renal secretion, cannot be explained on the supposition of mere congestion of the Malpighian capillaries. And, again, the low specific gravity of the urine, which was only 1012, (and this would have been reduced to a lower point by the previous removal of the albumen,) while the quantity did not exceed sixteen ounces in the twenty-four hours, affords decisive evidence of such a deficient excretion, as can be accounted for only by a greatly-impeded action of the secreting cells. Further, the history of Ager's case proves, that a very scanty secretion of urine, attended with rapidly fatal consequences, may be associated with only such a degree of change in the appearance of the secreting cells as suffices to show that they are implicated in the disease, although there has been no desquamation or shedding of epithelium.

A comparison of these cases with those of acute desquamative nephritis leads to the conclusion, that, as the free shedding of epithelium is an efficient means of eliminating abnormal products from the blood, so if, in the case which I first related, the desquamative process had occurred, the disease might have terminated favourably; and, in the last case, that of Lewis, a similar process might have shortened

the duration, and lessened the severity of the attack. It is probable that, in the case of Lewis, the escape from the Malpighian capillaries of the fibrinous materials which formed the waxy casts was a more effectual relief to the circulation than the transudation of serum alone would have been; and there is reason to believe, that actual hæmorrhage would have been still more beneficial. I am convinced, from repeated and careful observations, that the relief thus afforded to the circulation is more than sufficient to compensate for any impediment oft he secretory functions, which may result from some of the tubes being temporarily filled with coagulated blood or fibrin.

The cases of non-desquamative disease to which I have hitherto referred were of an acute character. I will now give some account of the same condition of kidney occurring as a chronic disease. The condition of urine which indicates the existence of the disease in question is commonly as follows:—When first passed, the urine is clear, and either of the natural colour and appearance, or somewhat paler than ordinary. After standing, it deposits no sediment, or merely a slight cloud, composed, perhaps, of pavement epithelium from the bladder. The quantity of urine secreted daily is generally less than normal, and often it is much below the standard of health. The specific gravity varies considerably; it is seldom very low, and often it is up to, or even above, the healthy standard; but the daily discharge of solids by the kidney is almost constantly below the normal amount. The quantity of albumen varies according to the intensity of the disease; but in most cases it is very abundant, so that the urine, when boiled, becomes almost solid. On a microscopical examination, the urine is found to contain neither casts of tubes nor renal epithelium. I have found this to be the case in several instances of the disease. Not unfrequently, however, a careful examination detects some of the small waxy casts which I have before described as found in the urine of Lewis. In some cases, scattered blood corpuscles may be present—but this is not common; and a copious sediment of blood, either in the form of blood-casts of the tubes or otherwise, is still more rare.

The general symptoms which accompany the disease are usually serious in kind and degree. The blood becomes much impoverished by the copious drain of albumen, and at the same time it is poisoned by retained excrement. Dropsy, which is present in almost every case, is often excessive, and very little influenced by any kind of medical treatment. Congestion or inflammation of the lungs or serous membranes, and symptoms referrible to the nervous centres, such as coma and convulsions, are frequent, and often fatal.

The appearances presented by the kidneys are well represented in Dr. Bright's plates (Nos. 2 and 4)—less faithfully by M. Rayer in his illustrations of what he calls the second and third forms of albuminous nephritis, which are, in fact, different stages of the disease we are now considering. The kidneys are usually increased in size and weight, and, as they are firmer and denser than in the normal state, their increase of weight is usually greater than that of their bulk. It is not unusual to find the weight of each kidney as high as 7 or 8 ounces.

The appearances of the kidney, which are most constant and characteristic, are a gradually increasing wax-like pallor of the cortical substance, and a loss of the colour which depends on its vascularity, while the medullary cones retain their vascularity and have a pale pinkish colour. As the disease progresses, the hexagonal lobular divisions gradually become obliterated, until, at length, there remain only a few small isolated vascular patches. The capsule may be readily removed, so as to leave a smooth, ungranulated surface. On a microscopical examination, the greater number of the convoluted tubes present no other change than that of being more opaque than usual, in consequence of an opaque granular condition, and occasionally a brownish yellow colour of their epithelial lining. The epithelial cells appear to contain an unusual quantity of solid matter. The central canal of the tubes is light and clear, not being filled with epithelium, as in cases of the desquamative disease. The canal, however, is sometimes filled with the white coagulable material which forms the small waxy casts; and in these comparatively rare instances of hæmorrhagic spots appearing in the cortical substance, some of the tubes are found to contain blood. The straight tubes of the medullary cones present no change of structure.

When an attempt is made to inject the kidney, it is found that many of the vessels are nearly or quite impervious, so that very little injection can be thrown into them. The condition of the blood-vessels does not differ essentially from that which I have described in connexion with the chronic desquamative disease.

The Malpighian bodies pass through a regular series of changes, from simple engorgement with blood, which appears of a red colour through the unthickened capillary walls, to a gradually increasing thickening and opacity of the vessels, as a result of which they finally assume the appearance of firm, whitish, waxy coils. In this condition, although the vessels appear quite exsanguine, the addition of acetic acid frequently renders their walls transparent, and brings into view a single row of blood-corpuscles in each capillary, the canal of the vessels appearing to be narrowed, while the wall is thickened. In some of the Malpighian tufts, there is no appearance of blood-corpuscles after the addition of acetic acid; the circulation through them had entirely ceased, and, as a consequence of this, the tuft and its investing capsule are shrunk and atrophied, while in other instances oil globules are collected within and upon the vessels.

The walls of the arteries are frequently hypertrophied, but less constantly than in the advanced stages of the chronic desquamative disease. As a general rule, the thickening of the arterial walls appears to bear a direct proportion to the duration of the disease, and an inverse proportion to the general enlargement of the kidney.

The examination of the inter-tubular capillaries gives, for the most part, a negative result. In the advanced stages of the disease, they can rarely be injected, and, when visible at all, their coats appear unthickened, and thus in remarkable contrast with the opaque and thickened Malpighian capillaries. The atrophy and obliteration of the minute branches of the veins are shown by the more or less complete disappearance of the hexagonal lobular divisions on the capsular surface. A microscopical examination detects no appearance of hypertrophy or thickening of their walls. The larger divisions of the veins are sometimes plugged by firm coagula of blood.

It is evident from the foregoing description, that the pale and exsanguine appearance of the cortical substance of the kidney, is partly the result of an actual obliteration of the vessels, and partly of the thickened condition of those which remain pervious, so that their contents are concealed by their opaque walls.

With reference to the increased size and weight of the kidney, there is reason to believe that they are chiefly the result of simple hypertrophy of the glandular tissues, similar to that which occurs when, from any accidental cause, one kidney has to do the work of both; and when, in the discharge of its double function, it acquires a corresponding increase of size and weight.

It must be assumed, that the proximate cause of the disease in question is the admixture with the blood of some morbid products which, not finding a free outlet by the ordinary process of desquamation, tend to embarrass the circulation through the kidney, and, at the same time, they will accumulate in the blood together, with some of the normal constituents of the urine, whose elimination would, of necessity, be retarded simultaneously with that of the morbid materials with which they are associated.

This accumulation of excrementitious materials in the blood will act as a stimulus to the increased growth and development of glandular tissue. For the tissues in question may be said to feed upon the materials for which they have an affinity, and the growth of a gland will be in proportion to the quantity of its proper secretion with which it is supplied by the blood. This appears to be the physiological explanation of the double size of a kidney which has to discharge the functions of two glands, as well as of the increased bulk of the organ which occurs when its secreted products are modified by the admixture of some morbid materials which are difficult of elimination.

It is a point of some interest to ascertain, what is the precise mode in which the bulk of glandular tissue is increased,—whether by the developement of new tubes and Malpighian bodies, or by an increased diameter or length of those which already exist.

There seems no reason to suppose, that new tubes are formed, nor does it appear that an increase in the diameter of the tubes is a common occurrence. One impediment to the last-mentioned change in the tubes is the existence of the fibrous rings of the matrix in which the tubes are

enclosed, and by which they must be constricted when, from any cause, the tubes are distended and dilated. That something of this kind actually occurs in cases of chronic non-desquamative disease, is, I think, nearly certain. The epithelium appears to become more bulky, so as to expand the tubes, which consequently become firmly impacted in the rings of the matrix; and this appears to be one cause of the increased firmness of the kidney which is commonly observed in these cases. It appears, however, that the enlargement of the kidney is insufficiently accounted for by any increase in the diameter of the tubes; and it is in the highest degree probable that there is an actual increase in their length and in the number of their convolutions. It is, of course, quite impossible to dissect out a tube so as to measure its normal length, or the increase which results from hypertrophy. The point in question can be determined only by the method of exclusion,—by ascertaining that there is no other observable condition which will sufficiently account for the existing enlargement of the kidney.

There is an important difference between the hypertrophy of the renal tissues which results from one kidney having to discharge the functions of both, the blood meanwhile containing none but its normal constituents, and those instances of hypertrophy which are occasioned by the urinary constituents being associated with some abnormal products whose elimination is constantly attended with more or less of difficulty. In the first-mentioned instances of hypertrophy, although a temporary embarrassment of circulation and secretion may be occasioned by the sudden assumption of a double duty by one kidney, yet, in process of time, the growth of glandular tissue enables the organ to perform its extra work with ease. The increase in the quantity of renal excrement to be discharged by the single kidney does not, in these cases, exceed a certain definite amount; it is exactly doubled; and this increase of secretory labour is provided for by a corresponding increase of glandular tissue.

But in the instances of enlargement of the kidney, which result not simply from the secretion of a double quantity of the normal urinary constituents, but from a continued effort to eliminate some morbid products, the development of secreting tissue appears to be unequal to the demands which are made upon it. Those abnormal materials whose tardy and difficult elimination have been the original cause of mischief, are constantly present in the blood, and add indefinitely to the strain upon the kidney.

The circulation through the inter-tubular capillaries is retarded in a manner which I can explain only by reference to the slow and incomplete manner in which the gland cells discharge their excretory functions, the serum of the blood is continually poured from the gorged Malpighian capillaries, and the blood-vessels themselves gradually undergo that series of pathological changes which I have already described. Meanwhile, the poisonous excrements, as well the normal as the abnormal constituents, accumulate in the blood and exert a noxious influence upon various parts of the body.

It will be apparent, from what has already been said, that hypertrophy of the secreting tissues is not a constant result of the non-desquamative disease. The conditions which appear to be necessary for such a result are a moderate degree of morbid alteration of the blood, and such a duration of the disease as may suffice for the growth of new tissues. Thus, in an acute case, like that which I referred to at the commencement of my lecture, there could be no growth of glandular tissue in the short period during which the disease continued. On the other hand, the cases in which the hypertrophy of the gland attains the greatest degree, are those in which the changes occur very gradually, so that the growth of secreting tissues nearly keeps pace with the extra work imposed upon it, and is only just insufficient for the complete elimination of the excrementitious materials contained in the blood.

A good instance of this occurred in the case of a man, named George Pow, who died lately in King's College Hospital. He was only 19 years of age, but he had been a great gin-drinker, and at the time of his admission, in October last, he was suffering from ascites, consequent upon cirrhosis of the liver in an advanced stage.

The urine was rather scanty, being, on an average, 26 oz. in 24 hours; its specific gravity ranged from 1010 to 1018; it was moderately albuminous, and frequently tinged with blood, much of which was in the form of tube-casts; no renal epithelium was observed in the urine.

Towards the end of October it was first noted, that his ankles were a little swollen. The swelling gradually increased and extended up the legs and to the scrotum; but the ascites was always the most prominent and distressing dropsical symptom. Meanwhile, he suffered much from dyspnœa, which gradually became more distressing until his death, which occurred rather suddenly on the 27th of November.

The abdomen contained a large quantity of liquid. The liver was very small, contracted, and granular. The spleen was much enlarged. The kidneys were also much enlarged, and both in an equal degree; one weighed 7 oz. The surface was smooth and pale, but with many small hæmorrhagic spots scattered over it. In most parts of the surface, the hexagonal lobular divisions remained distinct. The general appearance of the kidney was not unlike that represented in the 3rd and 4th figures of M. Rayer's 7th plate; but the increase of size and the decrease of vascularity were less than in M. Rayer's case.

On a microscopical examination the tubes and the epithelium presented the appearances which I have before described as characteristic of the non-desquamative condition. There was no evidence of desquamation, or of other morbid change, except in the few tubes which contained blood, and which formed the hæmorrhagic spots before mentioned. The Malpighian capillaries presented the appearances of slight opacity and thickening which are usually observed when there has been a moderate degree of impediment to the renal circulation. There was no evidence of hypertrophy of the arterial tunics.

It would be difficult to ascertain precisely at what time the enlargement of the kidney commenced. It is probable, however, that it had gradually increased during a period of several months before the fatal termination of the case; and it is little less than certain, that it was the result of a beneficial effort to eliminate from the blood some of the noxious excrement with which the gin-drinking habits of the patient were infecting it.

The escape of albumen from the Malpighian bodies was evidence that the growth of glandular tissue was unequal to the demands which were made upon it; the circulation was, therefore impeded, and blood, as well as serum, escaped from the gorged vessels, which had not undergone the degree of thickening that would secure them against rupture.

The pathological changes which I have described as being characteristic of the chronic non-desquamative disease are, in a number of instances, unassociated with any other morbid appearances in the kidney. In a large proportion of cases, however, more or less of fatty degeneration of the renal tissues is found to co-exist with the non-desquamative condition; and it is matter of considerable interest to ascertain the relations which the two forms of disease bear to each other.

A solution of this question is to be sought for—first, by a careful examination of the urine, repeated at intervals, during the progress of renal disease; and, secondly, by an inspection of the pathological appearances presented by the kidneys after death. Each mode of investigation has its peculiar advantages, and both lead to the conclusion, that one form of fatty degeneration of the kidney is a frequent consequence of that non-desquamative disease whose history we have just now been considering.

The appearances in the urine, which indicate the relation and the sequence to which I have referred, are a continuance, for a time, of those conditions which have already been described as characteristic of the non-desquamative disease, viz., a rather scanty secretion of highly albuminous urine, of moderate specific gravity, of nearly the natural colour, usually clear and free from sediment, and containing neither renal epithelium, nor casts of tubes; or, if any of the latter, only those small waxy casts to which I have before referred. After a period, which is very variable in different cases, while the general characters of the urine remain the same, there appears a light, cloudy sediment, which is found to contain some of the small waxy casts, in which are entangled one or more globular or oval cells, enclosing a a variable number of oil globules, some of the cells being completely filled with oil, and presenting the appearance of a dark opaque mass. Some of the casts have adhering to their surface a variable number of scattered oil globules, which have probably escaped from ruptured cells. Some

oil-containing cells and detached oil globules are also scattered over the field of the microscope.

When the disease has terminated fatally, as it too commonly does, the kidneys usually present the appearances which are represented in the 3rd figure of Dr. Bright's 3rd plate; also in the 8th plate of Rayer, in which he has given illustrations of what he calls the fourth form of albuminous nephritis.

The general character of the kidneys, as regards their increased size and weight, their smooth surface, and the pale non-vascular appearance of their cortical substance, are exactly similar to those which have already been described in connexion with the chronic non-desquamative disease. But in the cases now under consideration, there is the addition of certain characteristic granulations, of a yellowish white colour, which are scattered through the cortical substance. These opaque granulations, which have a general resemblance to the, so-called, atheromatous spots in arteries, are found, on a microscopical and chemical examination, to be composed almost entirely of fatty matter; and it is a point of much interest to ascertain the relation which the deposit bears to the normal tissues.

A large proportion of the tubes present, under the microscope, the appearances which I have already described as characteristic of the non-desquamative disease. The epithelium is more opaque and granular than in the natural state, and perhaps occupies a larger space within the tube, so as to produce a slight tendency to dilatation of the tube, and a close impaction within the surrounding rings of fibrous tissue. Occasionally some tubes have their canals filled with the white wax-like material, which, when it escapes with the urine, forms the small waxy casts; and, in other instances, some tubes are filled with blood, in which case hæmorrhagic spots in the cortical substance are visible by the naked eye. The incipient tendency to fatty degeneration is shown by the appearance of oil globules within the epithelial cells of some of the tubes. It is not unusual to see, in the epithelium of a kidney, which, in other respects, appears perfectly healthy, one or more minute oil globules; but, when fatty degeneration is commencing, the oil globules increase in number until, at length, they completely fill the cell. The epithelial cells of these tubes, which are yet in the early stage of fatty degeneration, retain their normal shape and position, forming a single layer on the surface of the basement membrane. As the fatty degeneration advances, the cells assume an entirely different form and appearance, they lose their irregular angular outline, and begin to appear globular or oval with homogeneous transparent walls; but when completely filled, as they often are, with small oil globules, they have a dark and opaque appearance. They have now entirely lost their epithelial character, and cannot be distinguished from the granular cells which are commonly seen in scrofulous or cancerous tumours. One of the yellow granulation, before mentioned, when placed under the microscope, is found to contain these cells in great numbers. A thin section carefully made with Valentin's knife, often shows a considerable length of convoluted tube completely filled and blackened with the opaque granular cells. So that as the hæmorrhagic spots in the cortical substance are composed of convoluted tubes filled with blood, these yellow granulations consist of tubes distended with oil. In many of the granulations it is difficult, and sometimes impossible to trace the continuity of the tubes; they appear to have been ruptured by over-distension, or perhaps they have suffered from atrophy, which would seem to be a necessary consequence of the degeneration of the epithelial cells, and the substitution of the granular oil, containing cells for the normal contents of the tubes. Or it may be, that the degeneration of the cells and the atrophy of the tubes are results of one common cause, viz., the impeded capillary circulation, which precedes and accompanies the changes in question. With reference to this last suggested cause of the phenomena, it is not without interest to remark, that there appears to be an analogy between the small spots of renal degeneration and those patches of degeneration of the muscular fibres of the heart which are associated with a more or less impervious condition of the branches of the coronary artery distributed to the diseased parts. Upon this view of the subject it would appear, that as the spots of renal degeneration are a consequence of obstructed circulation, they afford a kind of evidence of the actual existence of such an impediment. With regard to this point I cannot do better than refer to that section of Dr. Quain's excellent paper, in which he treats of "fatty degeneration connected chiefly with local modification of nutrition."(a)

It frequently happens, that the tubes being ruptured by the knife or other instrument used in preparing the section for examination, the oil globules become irregularly scattered over the specimen, and they often adhere to the fibrous rings of the matrix, so as to give the appearance of this tissue being the actual seat of the fatty deposit. I believe, however, that this appearance is delusive, and explicable, as I have suggested, by the bursting of the tubes and the consequent escape and dispersion of the oil. I have invariably noticed, that while the tubes remain entire, however abundant may be the oil within them, the inter-tubular tissue is free from deposit.

It is rare to find any oil in the Malpighian bodies, except in the form of a few globules in the atrophied capillaries; and even that is a less frequent occurrence in connexion with the form of disease now under consideration, than in cases of the chronic desquamative disease which I described in a former lecture. Oil, in variable quantities, is usually found in the straight tubes of the medullary cones, but this, in all probability, is a result of the lodgment in these tubes of materials which have been washed into them from above. The characteristic granulations rarely occur in the cones, as is at once evident from an inspection of the plates of Bright and Rayer.

That the material which forms the yellow granulations is of a fatty or oily nature is evident—first, from the peculiar and characteristic appearances of the globules when examined by the microscope; and, secondly, from the fact, that the granulations as seen by the naked eye, and the globules visible by the microscope, are entirely removed by digestion in ether. When the fatty matter is in the form of very minute particles, so as to have rather a granular than a vesicular appearance, it will be found that a moderate degree of heat applied to the specimen has the effect of fusing the fatty particles, after which they run together, and form large drops of grease.

The number of fatty granulations is very variable. In some cases there are only a very few scattered through the cortical substance, while in other instances they are thickly disseminated. It will be apparent, from what has already been said, that although, when present, they give a peculiar and characteristic appearance to the kidney, they are, at least in some cases, only a secondary consequence of the non-desquamative disease, which may, and often does, prove fatal without the occurrence of fatty degeneration in any form or degree.

The transition from one condition to the other, as indicated by the appearance of the oily casts in the urine, is one of much significance, and one which, with reference to prognosis, it is of great importance to observe. The non-desquamative condition, which is itself unfavourable for the patient's recovery, as compared with the desquamative diseases, is yet less so than that still greater deviation from the normal state which is indicated by the occurrence of fatty degeneration. I have already mentioned the fact, that during the convalescence from the acute desquamative disease, a small quantity of oil is occasionally seen in the urine, and that in most cases it quickly disappears, together with all other morbid products. We have seen, too, that during an acute non-desquamative attack, as in the case of Lewis, there may be threatenings of fatty degeneration which quickly cease. The most unfavourable cases are those in which, from the commencement of an acute attack, there is a large quantity of oil in the urine; or those in which the long continuance of the non-desquamative disease is succeeded by the signs of fatty degeneration. In such cases, although the duration of the disease may be very variable, the probability of recovery is extremely small, and the prognosis as unfavourable as in an ordinary case of tubercular disease of the lung.

In the cases of fatty degeneration to which I have hitherto referred, the kidneys have been found to contain the fatty matter in the form of characteristic yellow granulations, while the tubes in those portions of the gland which contain no granulations, either have no oil within them, or only very slight traces of it. In a certain proportion of cases fatty degeneration occurs in a somewhat different form, as is evident both from the general appearance of the kidney,

(a) Med. Chir. Trans., Vol. XXXIII., p. 147.

when examined by the unaided eye, and from the results of microscopical examination.

In the cases now referred to, the size and weight of the kidney are usually increased, the colour of the cortical substance is either uniformly pale or mottled by red vascular patches, and occasionally hæmorrhagic spots are scattered over the surface. The medullary cones retain their normal colour and vascularity. The consistence of the kidney is usually softer than natural, and frequently it has an œdematous feel and appearance.

On a microscopical examination, the convoluted tubes are found to be everywhere filled with oil, which has accumulated in their epithelial cells. The oil-globules are usually larger than in the cases of the granular form of fatty degeneration; and the detached epithelial cells, when filled with their oily contents, have a remarkable resemblance to the cells of the liver in the same condition. There is no oil in the inter-tubular tissue, and rarely any in the Malpighian bodies. The tubes of the medullary cones are also free from deposit, except such as appears to have been washed into them from the convoluted tubes. The fatty accumulation, therefore, is confined to the epithelial lining of those portions of the tubes whose office is the secretion of the solid constituents of the urine.

In some of the tubes the epithelial cells cannot be distinguished; they appear to have undergone a process of atrophy, and the tubes are occupied only by their fatty contents. There are none of the yellow granulations, which are characteristic of that form of fatty degeneration before described; the granulations in question being the result, as I have shown, of a fatty accumulation in certain sets of tubes, while the surrounding tubes are nearly or quite free; while, in the instances of what may be called the mottled form of fatty degeneration, the convoluted tubes are almost universally and equally filled with oil.

It is in this form of disease that the greatest amount of fatty matter is found on a chemical analysis. In one well-marked specimen, my friend, Dr. Beale, found, that the cortical substance of the kidney contained, in 100 parts, 79·650 water, and 20·350 solids, and of this solid matter 5·199 (rather more than one-fourth) was fat. In another specimen, I found that the dried solids formed 21·5 per cent.; and of this 3·5 was soluble in ether; so that the proportion of fat was slightly above one-sixth of the solid constituents.

With regard to the symptoms of this form of disease, when the kidneys have been in an advanced stage of degeneration, the condition of the urine and the general symptoms have not usually differed in any respect from those which I have already described in connexion with the granular form of fatty degeneration. The urine is very albuminous, its specific gravity deviating little from the standard of health, and being quite as frequently above 1020 as below that point; for, although the daily discharge of solids may be much reduced, the scanty secretion of liquid, and the large quantity of albumen together, keep up the density of the urine. When first passed, the colour of the urine is generally natural, and, after standing, it deposits only a slight cloudy sediment, in which may be found some small waxy casts entangling scattered oil-globules and oil in cells.

It is probable, that in some cases of this form of degeneration, there may be no appearance of oil in the urine; and there is a difference between the granular and the mottled form of fatty degeneration that would account for this fact. In the granular kidney many of the tubes contain a number of detached oily cells, which may readily be washed out by the stream of liquid flowing through the tubes; while, in the mottled kidney, there is commonly only a single layer of epithelium, which remains adherent to the basement membrane. This condition renders the escape of the cells from the tube scarcely possible, and the only way in which the oil could in these circumstances appear in the urine, is by the rupture of the cells, and the escape of their oily contents,—an event which, I believe, seldom happens, except when fibrinous materials effused from the Malpighian capillaries have coagulated in the tubes. In which case, the fibrinous plug, when it escapes, may carry with it some of the oil from the ruptured cells over which it has passed in its transit through the tube, and so the small waxy casts with oil may appear in the urine.

There is yet another important distinction between the granular and the mottled form of fatty degeneration. In the first-mentioned form of disease the formation of the fatty granulations is preceded, as I have already described, by a non-desquamative disease; this being indicated by the condition of the urine, which is highly albuminous, clear, and without epithelial sediment. On the contrary, the second form of fatty degeneration comes on very gradually and insidiously, and frequently makes great progress before the urine affords any indications of the existence of renal disease. I have occasionally found a large proportion of oil in the renal epithelium after death, in cases which have certainly not been attended by the secretion of albuminous urine. This is the form of disease which Mr. Simon observed in the kidneys of cats, after the animals had been confined for some time in a dark cellar, and which I am told is very common amongst London cats, even when they have not been subjected to the depressing influence of close confinement. Dr. Beale informs me, that he has, at different times, examined the kidneys of nine cats, and that, in every instance he found the tubes distended with oil. The cats had all lived in a brewery, and had been well fed and indolent,—a mode of life which is, of course, very unnatural for a cat.

I at one time believed, that an albuminous condition of the urine, and the other consequences of renal disease, might result from dilatation of the tubes by fatty accumulation within them, and a consequent mechanical impediment of the circulation, occasioned by pressure upon the inter-tubular capillaries. I supposed, that the apparent difference between the effects of fatty accumulation in the liver and in the kidneys,—the former organ suffering little, and the latter, as it appeared, much, from an identical condition of the secreting cells,—might be explained by reference to the anatomical difference between the two organs. The fibrous rings of the matrix, and the capillaries within them, would, as I thought, suffer compression, when, from any cause, the uriniferous tubes were dilated; and in this way the circulation would be impeded, so as to render the urine albuminous. I am still of opinion, that these mechanical conditions must exert a certain amount of influence; but I have long perceived, that I was wrong in attributing to them that great degree of importance which I formerly did.

The history of acute non-desquamative disease has shown us, that a fatal suppression of urine may result from a condition of kidney which is characterized by the almost total absence of any anatomical change in the organ. We have also seen, that a form of fatty degeneration is one of the unessential consequences of the chronic or non-desquamative disease. A consideration of these phenomena, and of the general history of renal diseases, will show the necessity for caution in attributing to morbid structural changes too much influence as causes of any symptoms with which they may have been associated.

It cannot be doubted, that a large and general accumulation of oil in the renal epithelium is a morbid condition, and an evidence of degeneration. But while we recognise the probability, that this degenerated condition of the secreting cells may diminish the functional activity of the organ, and, at the same time, be an efficient cause of further structural changes, we may also perceive the possibility, that the altered appearance of the cells, and the associated impairment of function, may be only consequences of some common cause—of a diminished vital activity, or, it may be, of a loss of the normal relations between the blood and the secreting cells, such as we must suppose to occur in the cases, already referred to, where there is no structural change in the kidney sufficient to explain the suspension of its functions.

At the commencement of my first lecture, I spoke of the benefit which renal pathology derives from the light which Mr. Bowman has thrown upon the anatomy and physiology of the kidney; and here it may not be out of place to remark, that the study of renal diseases is greatly facilitated by the fact, that the morbid deposits or accumulations to which the kidney is liable, occur, almost without exception, in such a situation within the uriniferous tubes, that portions of these materials are continually washed out by the stream of liquid which is poured into the extremities of the tubes, so as to come within the sphere of our daily observation.

We have thus an opportunity of ascertaining the nature, and tracing the progress, of renal diseases, which we do not possess in the case of any other internal organ. Hence arises the probability, that renal pathology and diagnosis will soon attain to that degree of accuracy which already characterises the anatomy and physiology of the kidney.

ORIGINAL COMMUNICATIONS.

DYSMENORRHŒA.

By EDWARD RIGBY, M.D., etc.

Senior Physician in the General Lying-in Hospital; Examiner in Midwifery in the University of London.

[Continued from p. 128.]

Miss H., aged 27, diminutive, feeble. Has been under treatment in the country for dysmenorrhœa, leucorrhœa, and, apparently, ovarian irritation, attended with much gastric derangement.

December 16, 1850.—The last catamenia were more copious than usual, and she felt proportionally relieved by the discharge. She remains free from suffering until the halfway period, and then has continued pain in the groins, extending to the loins and sacrum, with occasional darting pains through the pelvis. Pulse feeble, bowels costive, urine high-coloured; the passage of solid fæces produces pain; the abdomen just now is flat, but occasionally is much distended with flatus.

℞ Pil. hydrarg. gr. v., alt. noct.

℞ Potassæ bicarb. ℈iv., potassæ nitratis ℈ij., sp. ætheris nit. ʒss., aquæ menthæ pip. ʒvijss. M., ft. mistura, cujus sumat cochl. magn. ij. bis die post cibum.

℞ Ferri sulph. gr. ij., magnesiæ sulph. ʒi., acidi sulph. dil. ♏viii., aquæ menthæ pip. ʒi. M., ft. haustus primo mane sumendus.

21th.—Feels and looks much better. Bowels well opened once or twice daily; more healthy; urine still high coloured; tongue clean. The halfway time arrived on the 21st; she had the ovarian pain and pain of back all day, but it went off towards night, and has not returned; no flushing or pain of head; sleeps better.

℞ Acidi hydrochlor. dil., acidi nitrici dil., aa. ʒi., liq. taraxaci ʒi., infusi gentianæ co. ad. ʒviij. M., ft. mistura, cujus sumat cochl. magna ij. bis die ante cibum. Rep. pil. semel in septim. Rep. haust. ferri et magnesiæ sulph. primo mane.

January 20, 1851.—The period came nearly at the right time; the discharge was natural and attended with very little pain. Pain returned six days ago in the groins, loins, and lower part of abdomen, occasionally of a darting character, and has increased since; the bowels have been very well opened, but are offensive; tongue clean; pulse natural; urine thick; has had hæmorrhoidal throbbing for the last two or three days; has had a slight degree of leucorrhœa for two days.

Mist. ferri citratis effervescens bis die. Rep. mist. potassæ bicarb post prandium. Rep. mist. ferri et magnes. sulph. o. m.

March 31.—Has improved considerably in health; the last catamenial discharge came exactly at the right time, and without pains. Ten days ago she had an attack of rheumatic gout, during which the ankle swelled; since which she has suffered much shooting pain of the right eye, which is red, and waters a good deal; she has also pain of left shoulder. The bowels are offensive, although she has been taking blue pill occasionally.

℞ Hyd. chloridi, ext. aloes aquosæ, ext. colchici acet., pulv. ipecacuanhæ, aa. gr. j. M., ft. pil. j.; sumat j. alternis horis per duas vel tres vices.

℞ Potassæ bicarb. ℈iv., potassæ nitratis ℈ij., vini colchici ʒij., aquæ menthæ pip. ad ʒviij. M., ft. mist., cujus sumat cochl. magn. ij. bis terve die.

April 3.—Bowels opened five times since taking the pills; much scybala came away at first; the last evacuation contained plenty of yellow bile; urine clear, but high coloured; she had some pain last night across the pubes; the pain of right shoulder continues, but the pain of eye is gone; appetite better.

Rep. pil. et mist.

This is a well marked case of uterine and ovarian irritation, arising from intestinal derangement in a feeble system, attended with severe dysmenorrhœal suffering. It commenced at the half-way period, and continued until the menstrual discharge relieved her. From the severity of the pain in the ovarian regions, and the pain produced by the passage of solid fæces, we may presume that a considerable amount of ovarian irritation existed.

After a week of alterative and laxative medicines, a decided improvement was perceptible. The complexion had lost its unhealthy tinge; she felt brighter and less depressed; the secretions had improved, and, although the pain came on as usual at the half-way period, it went off again after a few hours, and the catamenia appeared at the right time, and in a natural manner.

The next attack of pain was a week earlier than usual, and lasted longer. The general health had improved, but there were still evidences of gastric derangement; and to this circumstance I think must be attributed the greater amount of pain,—the hæmorrhoidal congestion and slight leucorrhœa which occurred at this time. As this state appeared to be in great measure depending on the feeble state of the system, I decided on giving her a more powerful tonic, in the form of steel, which she was scarcely in a condition to bear in the first instance. The attack of rheumatic gout which followed, may probably be attributed to the increased power of the system thus obtained, for she had greatly improved in general health, and the last catamenial period had been quite natural, and without pain. I therefore gave her a combination of calomel, ipecacuanha, acetous extract of colchicum, and aloes, which was much recommended by the late Mr. Anthony White, and which certainly exerts a most powerful action on the liver, and produces great relief in gouty or rheumatic gouty attacks connected with gastro-bilious derangement. A large quantity of scybala came away, followed by a copious flow of yellow bile, and marked relief. The weather soon allowed her to take regular exercise, and thus to establish that activity of the various excreting organs upon which health so mainly depends.

Miss L. H., aged 15, pale, stout, feeble.

Feb. 17, 1851.—Pulse very weak; tongue pale and furred; bowels confined, evacuations dark; flatulence; urine thick; does not perspire easily.

Complains of severe suffering at the catamenial periods, which are preceded for two days by intense frontal headache, extending down the right side of nose. Much pain across the pubes when the discharge comes on; this pain lasts four days; the discharge, which is attended with a few clots, and is rather copious, lasts six. She has a good deal of pain in the loins and breasts at these times, which are also usually attended with a catarrhal attack.

℞ Pil. hydr. extr., coloc. co., extr. hyose., aa. ℈j. M. ft. pil. xij.; sumat. ij. h. s.

℞ Acidi hydrochlor. dil. acidi nitrici dil. aa. ʒj., liq. taraxaci ʒj., infusi aurantii co. ʒvij. M. ft. mistura, cujus sumat cochl. magna ij. bis die ante cibum.

℞ Sodæ potassio-tart. ʒiss. omni mane ex aquâ.

April 1.—Has had influenza; is looking clearer; pulse feeble; headache rather better; catamenia appeared on the 9th March; the precursory pain was decidedly less, but the discharge was more copious, and with a few clots; had a good deal of mammary pain, aching of limbs, &c., during the attack of influenza.

℞ Pil. hydr. gr. iij., ferri sulph. gr. ij., extr. coloc. co. gr. v. M. ft. pil. ij. h. s. s.

April 26.—Looking better and clearer; feels better; pulse stronger; tongue cleaner; bowels regular; catamenia appeared on the 18th, viz., after an interval of nearly six weeks, preceded by very little headache and less pelvic pain than usual; she had a good deal of mammary pain; the discharge was more free at first, but there was a larger amount of clots than before.

Rep. pil. p. r. n. ℞ Potassæ bicarb. ℈iv., potassæ nitratis ℈ij., sp. ammoniæ arom. ʒiiss., vini colchici ʒiss, aquæ menthæ pip. ʒviiss. M. ft. mistura; sumat cochl. magn. ij. bis die post cibum.

May 27.—Catamenia appeared on the 19th; the period passed over more naturally than she ever remembers. Looking better and feels much stronger; bowels moved two or three times daily; there is a good secretion of healthy bile. Is going shortly to Italy.

This patient belongs to a large family, several of whom, from living in luxury and indolence, have grown up to be delicate, and two have suffered severely from attacks of rheumatic gout and acute rheumatism. The unhealthy state of the bowels and urine, and the almost entire absence of cutaneous secretion, the intense frontal headache, just before the period, extending down the right side of the face, evidently of neuralgic character, and the febrile catarrhal attacks which usually came on at these times,

show that she also was more or less predisposed to similar affections.

Besides the ordinary alterative and tonic medicines which would be indicated in such a case, I thought it desirable to clear the bowels every morning with a dose of the Rochelle salt, so well known for its mild laxative action, and for its efficacy in relieving an acid and loaded state of the urine. Her appearance improved, and the next period was attended with decidedly less pain, although, under the name of influenza, she had what I presume was the catarrhal attack which usually accompanied these times. The precursory headache was not much diminished in severity. The next period, however, showed a considerable improvement in all her symptoms with the exception of a larger amount of coagula in the catamenia. Feeling strongly inclined to attribute this condition of the catamenia to the diathesis which I have already alluded to, the more so as two of her family had suffered severely from acute rheumatism and rheumatic gout, I determined, now that the secretions were better and the strength had improved, to try the effect of alkalies with small doses of colchicum, repeating the blue pill occasionally.

This treatment answered well; the next period was more natural than she had ever known it to be. The secretions were natural, and the general improvement of health and strength well marked.

OBSERVATIONS

ON THAT PORTION OF THE

"SECOND REPORT ON QUARANTINE," BY THE GENERAL BOARD OF HEALTH

WHICH RELATES TO THE YELLOW FEVER EPIDEMY ON BOARD H. M. S. ECLAIR, AND AT BOA VISTA IN THE CAPE DE VERDE ISLANDS.

By J. O. M'WILLIAM, M.D., F.R.S., R.N.,
Medical Inspector H. M. Customs.

[Concluded from page 515.]

Let us see how far this statement is borne out by the facts of the case.

Joana Texeira, who lived in the same room with Anna Gallinha, was seized with fever three days after Gallinha's death. In five days more her son was attacked. (Dr. M'William's Report, pp. 28, 9.) Maria Nazarinha, another visiter of Gallinha's, died during Texeira's illness. Manoel Affonso, who was seen in Gallinha's house, (although denied by his widow,) and who lived near to her, was attacked the day after Gallinha died. (Dr. M'William's Report, p. 26.) Gertrude Bent, who had visited both Gallinha and Manoel Affonso during their illness, was attacked the day after Affonso's death. (Dr. M'William's Report, pp. 27, 28.)

The links of the chain could easily be extended to greater length, both from Anna Gallinha and Manoel Affonso.(a)

It would have been much more correct had the "Report on Quarantine," instead of saying that the chain of evidence "here snapped," had stated, "here Dr. King's investigations, as regards Porto Sal Rey, are at an end."(a)

With regard to the outbreak of the epidemy at Rabil, the first case, that of Lonis Pathi, is thus spoken of in the "Report on Quarantine":—"It will scarcely be considered as affording an additional link, since, admitting that this man contracted his fever while employed on board the Eclair, his case would be merely one of infection from going on board a foul ship," etc. "But as in the locality of the dwelling of Gallinha, so in the district in which this man lived, there were local causes abundantly sufficient to account for the endemic origin of the disease." ("Report on Quarantine," p. 104.)

It will be remembered by those who have examined the Reports of the Boa Vista fever, that Pathi was taken ill at Moradinha, where he remained eight days, and was then conveyed to his house in Rabil, where, I am of opinion, he arrived about the 25th September, and that one of his daughters was first seized in the beginning of October; the rest of his children and his wife were attacked in succession, all much within a reasonable incubative period.(b) I need scarcely add, that the evidence as to Pathi's being the first case at Rabil is overwhelming.(c)

The "Report on Quarantine," with reference to Pathi's case, continues:—"It is also to be particularly observed, that a child in another family at Rabil, having no communication with the family of Pathi, died about the same time as Pathi's first child," &c.—(Report on Quarantine, p. 101.)

This statement is made, I presume, on the strength of a reply to a question (1327) put to José Marques; but the evidence of Joaquim Pathi (751), the cousin of Luis Pathi, (more likely to remember events in Luis Pathi's family than Marques,) goes to show, that Pathi's children were the first that were taken ill at Cabecada. But, even supposing that Manoel Fachina's child was the first case of death, it must be recollected, that he lived next door to Luis Pathi, in whose house, by Fachina's own evidence, his wife had been a frequent visiter during Pathi's illness. So much for this alleged "non-communication."

(a) The following clear and well arranged Tables, showing the results of the inquiry at Porto Sal Rey, are taken from the *British and Foreign Medico-Chirurgical Review*, Vol. I., p. 56:—

TABLE, No. 1.—Names of Persons living in the Houses in the Beira Row, Pao de Varella, adjacent to that in which the Soldiers were living. There are only four houses in the Row:—

Theresa Maria Jesus, next door above.
Anna Gallinha, and Anna Terceira, next door below.
Jose Lishoa, next door to Anna Gallinha.
Manuel Affonso, twenty yards away.
Gertrude Bent, next door to Manoel Affonso.

TABLE, No. 2.—Names of those taken ill first in Porto Sal Rey, with the Dates, as far as they can be ascertained. Those marked thus * fatal:—

*Anna Gallinha, October 12th.
Anna Texeira, October 19th.
*Manoel Affonso, October 17th.
*Maria Nazarinha, between October 20th and 25th.
Theresa Maria Jesus, between October 19th and 24th.
*Gertrude Bent, October 21st.
*Antonio Perica, October 20th or 21st.
Lishoa, October 21st.

TABLE, No. 3.—The names marked thus,* are those of persons attacked with fever after the intercourse referred to, within the incubative period:—

. Persons most in contact with Miguel Barbosa and Pedro Manoel:—*Anna Gallinha, who cooked for them; *Sylvester Rorness, whose wife also washed for them; *Anna Texeira, who visited them often.

2. Persons most in contact with Anna Gallinha.—*Anna Texeira, who nursed her: *Manoel Affonso, *Gertrude Bent, *Maria Nazarinha, often in the house; *Lishoa, lived in the next room; Piedad Angelica.

3. Persons most in contact with Anna Texeira:—Dr. Kenny, not taken ill for sometime afterwards; *Her son, who nursed her; *Theresa Maria Jesus.

4. Persons most in contact with Manoel Affonso:—*Luis Ignes, visited him often; *Antonio Perica, who carried the corpse to Rabil; *Gertrude Bent; *the wife of Joachim das Neves.

5. Persons in contact with Sylvester Romess:—*His child, niece, and wife.

6. Persons in contact with Antonio Perica:—*His wife; *Eusebio da Luz, who nursed him; *a girl in the house.

7. Persons in contact with Lishoa:—*A son of Senhor Carvahal, who was two nights with him.

"If our readers will now glance over the names contained in these three Tables, they will find that each is almost a copy of the others, and they will find that the proof is complete, that certain persons, living nearest and most in contact with the two soldiers, were first attacked. This is a fact, and is independent of all explanation or hypothesis of contagion."—*British and Foreign Medico-Chirurgical Review*, Vol. I., p. 57.

(a) "With regard to the future spread of the disease in Porto Sal Rey, Dr. King is silent; he does not allude to any cases subsequent to that of Anna Gallinha."—*British and Foreign Medico-Chirurgical Review*, No. 3, p. 167.

(b) Dr. King states, that the children were not taken ill until a month after the father's return home. I must here observe, with reference to this or to any other difference between Dr. King and myself, as regards the epidemy, that I beg to refer to the answers given to my questions, which are set down in detail. Dr. King's Report contains no such means of reference; and I must leave it for others to decide whether the mode of inquiry pursued by Dr. King at Boa Vista, or that adopted by myself, was best calculated to elicit truth from the interrogated, or to convey the real facts of the case to others. Dr. King's method of inquiry is to be found at p. 4 of his Report.

(c) "The following are the names of the owners of the houses immediately adjacent to Luis Pathi:—Manoel Fachina, Joaquim Marques, Joaquim Pathi, Manoel Rosa Luis Delgado Nazario.

"The following are the names of those first attacked in Rabil, with the dates, as far as they can be ascertained:—

"1. Luis Pathi—Sept. 18th. [Moradinha, J. O. M'W.]

"2. Wife of Manoel Fachina—soon after the return of Luis Pathi to his own house, viz., the 26th or 28th September. She had been a good deal in the house of Luis Pathi.

"3. Child of Manoel Fachina—very soon after the mother. This child died about the same time as Luis Pathi's child, or, according to some evidence, before.

"4. Two children of Luis Pathi—4th and 11th October.

"5. Manoel Marques—very early in October.

"6. Joaquim Marques—between the 8th and 12th October.

"7. Joaquim Pathi—about this time.

"8. Family of Joaquim Pathi—soon after the father.

"9. Manoel Rosa—immediately after Joaquim Pathi.

"10. Child of Manoel Rosa—two days after her father's attack.

"11. Luis Nazario—two or three days afterwards."—*British and Foreign Medico-Chirurgical Review*, Vol. I., pp. 57, 58.

It seems scarcely necessary here to follow out the Fever in its course to the other villages. In my Report, it will be found, that its origin at each village is traced to contagious importation. This I always ascertained by going from house to house, and personally examining the inhabitants.

I must claim for my Report, in all cases of supposed difference between Dr. King and myself, the probability, at least, of much greater accuracy as to events and dates than that of Dr. King; for my conclusions were founded on the examination of many persons on the spot, nay, in the very houses where the fever first appeared, and in those to which the fever afterwards spread, in each village.

This does not seem to have been done by Dr. King; as, for instance, he seems to have relied almost exclusively, if not entirely, upon the evidence of the Judge at Fundo das Figueiras, for his information regarding the whole three eastern villages, Cabeca dos Tharafes,—Fundo das Figueiras,—and Joao Gallego.

With regard to Cabeca dos Tharafes,—the most important, in this inquiry, of the three villages, inasmuch as it was the first in which fever appeared in that part of the island,—I have good reason to believe, that Dr. King did not once enter this village. Then, as respects Porto Sal Rey, the mode in which Dr. King obtained his evidence there was chiefly, if not wholly, thus:—His list of queries were written down, and John Jamieson, the Consul's storekeeper, alone went the round of the houses, getting answers to those queries in the best manner he could, and then brought them to Dr. King, who transcribed them, thus obtained, into his own journal, or note-book.(a)

This was not my mode of investigating the facts of the epidemy. I found John Jamieson a very useful and willing assistant in all my journeys and inquiries; but I myself was present at the examination of each person, and put the questions and received the answers myself.

I should not have taken this notice of Dr. King's method of investigation, had I not felt compelled to do so, from the evidence I procured having been alleged, in the "Quarantine Report," to be "loosely taken," &c.; while the "details" of Dr. King are stated to be "most circumstantial." I feel necessitated to defend my own Report, when unfairly assailed, and to show the real value of the "set-off" attempted to be brought against it.

In the "Report on Quarantine," it appears to be assumed, that, to prove the contagiousness of a disease, all persons exposed to the supposed source of contagion, whether directly, by intercourse with the sick, or indirectly, by communication with those who, although visiting the sick, continue in good health, ought to be infected.

A very slight acquaintance with medical etiology would have suggested, that the laws of contagion involve no such necessity. It is in accordance with those laws that the greater number of those exposed to morbific influences escape, and that some of those chiefly in contact suffer. "To insure," says Professor Simpson, "in any instance, invariability of antecedence and consequence among physical, metaphysical, and vital phenomena, the circumstances under which the causes are applied must be, at all times, in all necessary points, perfectly similar." Moreover, before the body can be rendered susceptible of a contagious or any other morbific influence, it must be so far altered from the standard of perfect health as to constitute that particular, although unknown, state which is called "predisposition." It is well known, that physicians and others constantly visit patients labouring under notoriously contagious diseases, but nevertheless escape. Or they may escape nine times, yet be infected on the tenth.

From want of attention to these simple but well-established facts, and from not duly considering the particular circumstances of each case, we find that, throughout that part of the "Report on Quarantine" which treats of the Boa Vista epidemy, it seems to be a matter of wonder how, if the disease in the Eclair was contagious, it was not introduced into the town by the crew, who got leave shortly after the ship's arrival; why the women who washed the foul linen escaped until after the fever was general in Porto Sal Rey; why Captain Estcourt did not infect the family of Mr. Macaulay; why the officers of the Eclair and their servants, who lived in the house at Santa Barbara, did not communicate the disease to the people of that house, or to that of the town; why Dr. Kenny, Dr. Almeida, and John Jamieson, did not carry the infection with them to their respective homes; why the soldiers Perez and others did not at once infect the barracks; why the labourers aboard the Eclair and at the coal heap, and their families, did not earlier suffer from the disease; why the Governor-General and his suite, who fled to the other islands, not only all escaped, but failed to infect any others in those islands, etc.

Facts are wanting to establish with absolute certainty, although we are far from being in a position to deny, the transmissibility of yellow fever through the medium of fomites. All, however, will admit, that this mode of the propagation of any disorder capable of being propagated from the sick to the healthy, is far less powerful than that arising from direct intercourse with sick persons.

Now, it has never been alleged,—in fact, it is in the highest degree improbable,—that any of the petty officers, or of the few seamen who got leave, were otherwise than in good health, or were not, at all events, as well as men could be after service on the West Coast. With respect to the washerwomen, the clothes washed by them belonged to the officers. Now, no officer, with the exception of two, (the gunner and a master's assistant, who were placed on the sick list for fever on the 1st August, and discharged to duty, the one on the 13th and the other on the 19th of the same month) had been the subject of fever from its outbreak up to the period of the arrival of the Eclair at Boa Vista. In the Admiralty Correspondence (page 28) it is, moreover, stated, (and, by the way, is not noticed in the "Report on Quarantine,") that the bedding and clothes of all deceased persons were thrown overboard. The washerwomen, therefore, could have washed the clothes belonging to two persons only who had suffered from fever, but none belonging to those who had died.(a)

As respects Captain Estcourt, after he went to Mr. Macaulay's house, he observed the greatest precautions after his visits to the fort, carefully washing himself and changing every article of clothing before seeing any member of his family. He became a guest of Mr. Macaulay on the 25th of August, and Mr. Macaulay and his family left Porto Sal Rey for the north side of the island, on the 4th of September, and did not return until the 27th of that month; so that, during one-half of Captain Estcourt's sojourn at Porto Sal Rey, the only persons with him in Mr. Macaulay's house were the black servants.

As regards the officers and their servants, the house in which they lived was entirely given up to them, and occupied by them exclusively. They were sent to the fort in accordance with a rule of Captain Estcourt's, rigorously carried out, not only as regarded the officers and the crew, but likewise himself. Mr. Macaulay, in a letter to me, dated at San Nicolas, March 30, 1846, says, on this head:—"Dr. Stewart states, at page 5,(b) some of the officers and their servants were attacked with fever while in the town; the Captain was taken ill while living in the town in the house of an English family. The purser lived in the house of another English gentleman when taken ill, and remained there until the day before his death."

"The above passage," observes Mr. Macaulay, "conveys a very erroneous impression. The rule laid down by Captain Estcourt, *and strictly followed in every instance*, was, that, if any of the officers or servants living in the town were taken ill, they should be *immediately* conveyed to the hospital on the small island. I was present on the occasion when one of the Eclair's lieutenants came to request of Captain Estcourt that a brother officer who felt unwell might be allowed to remain, at least for a short time, at the officers' quarters in the town, until it could be ascertained whether he had fever or not, as it was hoped that a dose of medicine would set him to rights. Captain Estcourt refused to comply with the request, stating, that he should require all his officers to follow the same course which he should observe himself, and to remove to the hospital at the fort, as soon as any symptoms of illness was felt. This was the conduct actually pursued by Captain Estcourt when he as attacked a short time afterwards."

The intercourse between John Jamieson and the Consul's family was restricted as much as possible, and Dr. Kenny lived in a house by himself. The family of Dr. Almeida was

(a) I have received this information from John Jamieson himself, a man whose word I never had reason to doubt.

(a) I have since ascertained, that the Gunner's clothes were not taken ashore. Those who know anything of men-of-war, are aware that the clothes of the crew are washed and scrubbed on board.

(b) Manuscript Report.

at this time chiefly at Boa Esperanza, about two miles from Porto Sal Rey; and he visited the fort once only while the sick were there, or twice at the very outside.

It never has been alleged, that Georgio or the two prostitutes Anna Gaspar and Rozina St. Antao, were infected by the crew of the Eclair. The headache and other symptoms, mentioned by Georgio, constituting as they did part of his evidence, were noticed in my Reports, as statements arising out of the inquiry, but not as matters of importance.

Athanasio Perez was relieved from his guard at once when he was taken ill at the barracks. Pedro Manoel, of the same guard was not sick, until the fever was general in the town, in which there is nothing very extraordinary: and Antonio dos Santos, also of this guard, was not taken ill until three weeks after his return from the fort. The non-infection of the soldiers at the barracks by the disease proves nothing further, than that, from those cases, or from the case of Manoel Antonio Alves, who was four or five days ill in the room behind the barracks, the disease was not communicated,—a circumstance by no means uncommon in the history of contagious disorders, and constituting a mere negative fact of little moment in an epidemy, which furnishes abundant instances of positive contagious propagation. (a).

It is judged, in the "Report on Quarantine," that the fever, if contagious, ought to have been communicated to the labourers employed on board the Eclair, in the launches, and at the coal-heap, and by them to have been conveyed to their families at a much earlier period.

The answer to this is obvious. No labourer, with the exception of Portajo, the slave who died, ever was within the walls of the fort while the sick were there, although the coal-heap labourers mixed with the healthy portion of the crew; but many of them (Luis Pathi among the rest) were on board the Eclair the day on which the sick were re-embarked.

As most, if not all, of the labourers were at one time or another on board the Eclair, I might, with much greater reason, ask, How did they escape from the effects of the dreadful malaria alleged to have existed in the hold? The labourers, at all events a large portion of them, were continually being exposed to this supposed source of miasmatic poison; but they were not within the sphere of contagion from the sick until the last.

The soldiers of the guard, on the other hand, were all the while more or less in direct intercourse with the sick at the fort, and accordingly we find among them the first attacks and the first deaths at Boa Vista.

Nor, as has been said before, is it at all necessary, as is assumed in the "Report on Quarantine," that "to prove the spread of a pestilence by contagion, communication, either direct or indirect, must be proved to have existed between all the persons attacked." ("Report on Quarantine," p. 104.)

If the first cases of yellow fever, or of any other disorder, appearing in any town or locality, are distinctly traced to a contagious source, we have no right to deny, although we may not be able to prove communication in *every* case, that the spread of such disorder is due to the same cause. If the disease be admitted to be contagious in the first cases, *à fortiori*, it must also be presumed to be so in all the other cases, although we may not be able to connect every link of the chain of propagation. Our failure to establish such an unbroken chain in all the cases occurring from the beginning to the end of an epidemy, would not show the want of a contagious cause throughout, but rather our want of success in discovering it in every such case.

"The Report on Quarantine," p. 96, observes—"According to the view of Dr. M'William, therefore, this disease must have been of a very singular character, for in its origin at Shebar it was not contagious, at Boa Vista it became contagious, while in the other islands of the Archipelago, wherever the sick and the uninfected fled, it again laid aside its contagious character, and did not spread to a single individual."

This is not the place to discuss the question of a disease primarily not contagious, having the property of contagion impressed upon it by contingent circumstances; but it has been generally allowed, that the history of the events of the Eclair greatly favour this view. But the statement, that it laid aside its contagious qualities afterwards, demands special attention, as it rests upon no grounds whatever.

I assert, without fear of contradiction, that with one very notable exception that came to my knowledge long after my "Report" and "Remarks" were written, among all those who fled from Boa Vista, it cannot be shown that any sick persons landed at any of the other islands. Those who fled from the island were people of the better class, and while at Boa Vista adopted precautions against infection. This was the case with the Governor-General, Mr. Macaulay, the Collector of Customs, and others who left the island after the fever had well broken out. The Governor-General, in his letter, distinctly states, "not one of those who emigrated to the different islands of the Archipelago *had the disease, or communicated it to others.*" Where did the authors of the "Quarantine Report" learn that any "*sick*" fled to the other islands?

"When," says Mr. George Miller, "the ship that conveyed the Governor-General and his suite to Brava, was entering the harbour of that island, one of His Excellency's servants was found to be suffering from the fever. The dismay and confusion at this discovery were great; but it was quickly resolved upon that the servant should be landed and placed in a cavern at some distance to leeward of the landing place, and there kept in strict quarantine. The sequel is this: the poor man died, all his things were burned, and the body was, with the observance of great caution, buried. The disease was not communicated to the shore; and the Governor now issued a Portaria, declaring Boa Vista infected, and subject to the most stringent quarantine regulations; and most rigorously were they enforced."

I found it impossible to arrive with any degree of certainty at the correct amount of the population of Boa Vista not attacked. As an approximation to the truth, I supposed that a third of the whole probably escaped. But we know, without doubt, that, with the exception spoken of, Don José di Norronha and his suite, consisting of sixty persons,(a) Mr. Macaulay and his family, Mr. Pettingall and his family, the Consul and his family, Mr. Martines and his family, who left the island, all escaped, except those that afterwards returned and had intercourse with sick persons. If we add to these, Dr. Almeida's family and servants, and those who segregated themselves at Espinguera, at Cantor, and at Agua dos Caballos, we have, on the most moderate computation, 250 persons, among them upwards of fifty Europeans, who adopted precautionary measures, and all escaped.

Now, I will put it to any unprejudiced person, whether favourable or unfavourable to the doctrine of contagion, how, supposing the disease to have depended upon a cause existing in the general atmosphere, Don José, his suite, and all the other families, could by any means escape? Can it be believed, that not one, even among the Europeans, was susceptible of this alleged generally pervading influence?

Judging from all experience of the action of miasmatic poisons, the escape of so many persons is inexplicable, on the assumption of the disease having been owing to a virus floating in the general atmosphere. But their immunity can be rationally accounted for, under the precautionary circumstances stated, on the ground of the propagation of the

(a) An attempt is made, in a note (pp. 306 to 317) appended to the "Report on Quarantine," to damage the value of the evidence, because Miguel Barbosa stated that Luis Briza was sick in barracks when he was, and as Briza died on the 12th November, he was ill about thirty-six days. No notice, however, is taken of the evidence of Corporal da Cruz Silva, in which he says, that "he thinks Luis Priza was not taken ill until the fever was general in the town." Corporal Silva belonged to the same guard with Briza. And as Briza did not die until November 12th, the probability is that the corporal was right, rather than Barbosa, who was himself ill at the period of which he spoke. Then there are also objections, because the soldiers of the guard did not earlier infect the barracks; because there is no proof that Luis Pathi assisted to hoist the sick in, although he was on board when the sick came from the fort; because one man—the slave of Senhor Nicolas Tavares—disputes the claim of Chico Fernandez having been the first case at Estacia, in opposition to the evidence of Senhor Tavares himself—a most intelligent man, and to that of Chico's sister, Libania; because it is doubtful whether Dr. Almeida visited the fort once or twice. These and other comparatively insignificant circumstances are dilated upon at length, and apparently with great self-satisfaction on the part of the writer. But the note throughout is indicative of a desire, it may be of a capacity, limited to carp at the occasional discrepancies to be found in the evidence—to deal, in short, only with the minor and unimportant details and not with those main and leading facts of the case which serve to guide the judgment in the elimination of the truth from any amount of evidence submitted to it.

(a) In my "Report" there is a mistake (whether owing to an error in the manuscript Report, or to a typographical error I cannot say) concerning the suite of the Governor-General. It is stated, that the "suite" consisted of sixty Europeans. This was not the case. There were sixty persons, but by far the greater number were natives of the islands, and the remainder were Europeans.

disease having been dependent upon intercourse with the sick.

The opinion of the Governor-General, as expressed in a letter that appeared in the *Gibraltar Chronicle*, attributing to the fever at Boa Vista an endemic origin, is very prominently paraded in the "Report on Quarantine." His Excellency's letter to Dr. King, an extract from which is given in my "Remarks on Dr. King's Report," p. 10, telling him that no such disease as that which devastated Boa Vista was ever known in those islands before the arrival of the Eclair, and that "the fevers which have a local or indigenous origin, are called by the doctors *miasmaticas*," is passed by in silence in the "Report on Quarantine." In a letter to me, dated Jan. 8, 1848, (also to be found in my "Remarks," p. 10,) His Excellency says: "You here see I have changed my first opinion. I am quite convinced that the fever was contagious, and that it was introduced into Boa Vista by Her Britannic Majesty's ship Eclair." Long before His Excellency wrote to Dr. King, he stated (in a letter to Mr. George Miller), "I am convinced the fever was contagious from its commencement, and during its progress over the island."

These statements, of which the authors must have been fully cognizant, are never alluded to in the "Report on Quarantine."

Nor is there in the "Report on Quarantine" the slightest notice taken of the well-established instances of exemption from fever procured during its prevalence at Boa Vista by isolation and segregation of healthy individuals from infected districts, which are detailed in my "Report," pp. 107, 108, and in my "Remarks," p. 10. "At *Espingueira*, near Mount Broyal, *at Cantor*, near Mount Ochello, and at *Agua dos Caballos*, situated little more than a mile from Cabeca dos Tharafes, I saw so late as May, 1846, little colonies, amounting in all to fifty-seven persons, who, in the early part of the epidemy, had fled from Joao Gallego, and other villages, and cut off all communication with them. Not one that remained was attacked."(a)

I would ask,—Is the omission of all notice of these statements dealing fairly with the question? There surely appears in such a mode of procedure a one-sidedness more becoming a reckless crusade against Quarantine and contagion, than a philosophical and impartial search after truth.

In a note appended to the "Report on Quarantine," pp. 237, 238, there is an extract from Dr. King's "Report," in which, after speaking of the murrain among the cattle, it is stated, that "there was this remarkable coincidence,—that after an interval of *some months*, and the disappearance of the disease both in man and beast, the same fever broke out again in the towns and villages about the rainy season."

Dr. King has not supplied us with the facts upon which he built this statement; but I am in a position to prove, that the first case after I left the island occurred on the 19th or 20th July, 1846, in a person well supplied with the necessaries of life, in one of the largest, cleanest, and best-ventilated houses in the town. Recovery took place after extreme peril. The next case was a respectable salt-merchant, who also lived in a good house, and had visited the first case. The third case was also a salt-merchant in good circumstances, and living in a good part of the town. I could multiply the cases if necessary. I shall only add, that communication with sick persons was in each case proved, and that the two last-mentioned cases died during the illness of the first. The girl "Perpetua" died at Moradinha, on the 1st of June, and on the 13th of the same month the remaining patients were convalescent.(b) When these dates are compared, the actual interval between the disappearance and re-appearance of the fever will be found to shrink considerably within *months*. The interval, in short, instead of being *months*, as stated by Dr. King, was little more than *one month*, or about the same as that between the last cases at Joao Gallego (the end of April) and the outbreak at Moradinha (the 30th May of the same year). By Dr. King's own account, the rainy season of 1846 did not set in until about the middle of August.

The note adds:—"Dr. Almeida, of Boa Vista, considered the disease alluded to as an aggravated type of the bilious remittent, and in such belief he positively continued until after the arrival of *a communication* from the British superintendent of Quarantine." In a foot note, it is stated, on the authority of Dr. King, that "Dr. Almeida was a general merchant, who sold a few simple drugs, and gave his advice gratis. It might hence be inferred, that his opinions, even if they had been fixed, could have been of no great value."

Dr. King held no such despicable estimate of Dr. Almeida's opinion, when he brought it forward, rather triumphantly, and in contradistinction to the opinion of every one else on the island, in his "Report," p. 4, to the effect that the disease at Boa Vista was "an aggravated type of bilious remittent."

In my "Remarks," p. 14, I adduced Dr. Almeida's evidence, given eight months before Dr. King saw him, and a letter written by Dr. Almeida six months after Dr. King left Boa Vista, showing clearly, that Dr. King was entirely in error regarding Dr. Almeida's opinion as to the nature of the disease. After this, any disparagement of Dr. Almeida must come from Dr. King with a bad grace. It is too late to tell us, now, that Dr. Almeida's real opinions do not suit Dr. King's views,—that they are not to be relied upon.

I am also enabled to assert, that no communication was ever sent, either directly or indirectly, to Dr. Almeida by the British Superintendent of Quarantine, nor did Dr. Almeida know anything of the opinions of Sir William Pym regarding the fever up to the time I left Boa Vista.

But, as it appears that, notwithstanding the evidence and the letter to which I have just alluded, doubts seem to remain, in some quarters, regarding Dr. Almeida's views and the nature of the fever that devastated Boa Vista, I am compelled, although most reluctantly, to append the following extract of a letter from Dr. Almeida to myself on this subject:—

"From conversations that Dr. Leao and myself had with Dr. King, we discovered, that his object was to prove that the yellow fever was not imported into this island by the steamer Eclair. He always found us opposed to this; and we proved to him by positive facts, that he was in error. I told him, that during nearly forty years' residence in Boa Vista, I had never before seen a case of yellow fever, either here or in any of the other islands of the Cape de Verds Archipelago; but that I had occasionally seen intermittent fevers at Rabil when, in the rainy season, the waters remained stagnant for some time. Dr. King has, in his report, been pleased to pervert these conversations to suit his own erroneous views, not remembering, perhaps, that to foist them upon the public he has misused the name of one who, like himself, is in the Profession."

In the same spirit, and proceeding from the same source, an attempt is made in the "Report on Quarantine," p. 107, to deteriorate the value of the evidence obtained at Boa Vista, the witnesses being described as poor and ignorant, giving their "evidence in the loosest possible manner; their statements as to details and occurrences alleged to have happened several months before the inquiry took place were received implicitly, without examination into the correctness of their answers and the credibility of their testimony;—all the witnesses of this class appear to have spoken under the influence of the strongest feeling of self-interest, with a view to establish a claim to pecuniary compensation, should they make out a case against the Eclair."

As the chief of these allegations against the people originated with Dr. King, one is led to inquire how, from such sources, was it possible he could obtain his "indubitable facts"? As to the length of time intervening between the occurrences and the inquiries into them, if this be raised as an objection, it must apply with greater force to Dr. King's inquiries than to mine, because I preceded him on the island by eight or nine months. As regards our respective methods of conducting the inquiry, I might waive the discussion of this part of the subject, and leave it in the hands of others, observing, however, that high legal as well as medical authorities have considered the value of the evidence in the very opposite light to that which the "Report on Quarantine" might lead people to suppose.(a)

The assertion, that the statements of the witnesses were received, "without examination into the correctness of their answers," is at variance with fact. When so many persons were examined, and upwards of 1600 questions answered, it could hardly be expected that some discrepancies would not occur. I think, however, it will be generally allowed that,

(a) Dr. King, in his Report, does not allude to the negative evidence derived from these sources, or, indeed, from any source whatever. This may be explained upon the circumstance of his never having visited any one of these places of refuge.

(b) Vide Dr. M'William's "Report," etc., pp. 94, 95.

(a) For Dr. King's method of inquiry, see Dr. King's Report, p. 4. The mode I adopted is to be seen in my "Report," and in the "Remarks," p. 11.

in every essential point, the evidence of the people tallies with that of the higher orders at Boa Vista, and also with the information that has since come to light from Consul Rendall and others.

In a case of this kind judgment ought to proceed, not from a few casual discrepancies, such as occur in the evidence, and which are so eagerly caught up in the "Report on Quarantine," but from the general tendency of the evidence. The order of events may be noted without precision as to dates; but in the main points, as regards the first attacks at the Fort, at Porto Sal Rey, Cahecada, at Boaventura, Estacia Velha, Fundo das Figueiras, and Joao Gallego, the dates are given so as to be correct within one or two days. There is less certainty about the dates of the invasion of the other villages by fever; but the first attacks are in every case defined, and the radiations of the disease are followed out more or less extensively from each of these foci.

I consider that the following observations on the *Summary*, contained in pp. 114, 115, of the "Report," to be justifiable from the whole tenour of the evidence adduced in the case of the Eclair and Boa Vista:—

1. The fever which broke out in the Eclair, when on the west coast of Africa, was the common endemic, which became altered in character as the cases increased at Sierra Leone, between Sierra Leone and Boa Vista, and at Boa Vista, is proved—

By the great proportionate increase of mortality at those periods.

By the report of survey of the medical officers, held Sept. 13, by order of Capt. Buckle, senior officer at Boa Vista, in which it is stated, "*the extremely malignant character of the fever which has resisted the treatment usually found successful in the common endemic fever of the coast.*"—(Admiralty Correspondence, p. 18.)

By the opinion of Dr. Carter of the Growler, who, according to a letter from Capt. Buckle to me, considered "the disease among the Eclair's crew at Boa Vista to be contagious," and, "therefore, by his advice," adds Capt. Buckle, "I restricted the intercourse between the Growler and the Eclair as much as the pressing nature of the service would admit.

By the opinion of Sir W. Burnett and of Dr. Bryson, who, on the ground of the disease having become contagious at the fort, account for the attack of Dr. M'Clure.—(Admiralty Correspondence, p. 55.)—"Fevers of Sierra Leone," etc., by Dr. Bryson, p. 134.)

2. The petty officers and a few of the sailors did get leave after the arrival of the Eclair at Boa Vista; but there is no reason to suppose, that any of those who had this indulgence were at all sick. The officers who lodged in the house at Santa Barbara, on the beach at Boa Vista, were removed from it the moment they had even a premonitory symptom of disease; the house was exclusively occupied by them and their servants, and none of them when sick were nursed by the inhabitants.

3. The washerwomen who washed the linen of the officers (the crew of men-of-war do not send their linen to be washed on shore) were not infected by reason of the washing. But, up to this period, two officers only had been on the sick list from fever; one for a period of twelve days, and the other for eighteen days, both cases recovering. The clothes of one of these officers only were sent on shore. The bedding and clothes of deceased persons were carefully thrown overboard. Moreover, it has not been contended that the power of fomites to propagate infection, is at all equal to that of intercourse with the sick.(a)

4. The labourers were not infected, nor did they infect their families while the Eclair was at Boa Vista; which is not to be wondered at, seeing that they had not, until the last, direct intercourse with the sick, although they mixed on duty with the small portion of the crew that remained healthy.

5. The Cape de Verds are within the yellow fever zone, and they have experienced severe outbreaks of epidemic fever; but never within the memory of man, either before or after 1845-6, was yellow fever known at Boa Vista, or at any of the other islands of the groupe.(b)

7. The physical and social conditions of Boa Vista are those which might originate fevers; but the theory of "localising influences," as applied to the yellow fever epidemy, signally failed, more especially at the Ravine of Rabil; where the alleged localising influences were in greatest abundance, there was the smallest mortality. Moreover, fever broke out at Moradinha, in the Ravine, where there was nothing like any appreciable, local, physical condition to produce it. The failure of this theory to account for the outbreak in July, 1846, was, if possible, still more remarkable; inasmuch as the fever on this occasion first appeared in one of the best ventilated and cleanest houses of the town, and the person first attacked was well supplied with the necessaries of life, and such was the case with the great proportion of cases that took place at this time. The disease for some time was confined to the very best part of the town. No rain fell until a month after the disease had re-appeared, and several cases had died before any rain fell.

How is the occurrence of these cases to be explained on the ground of a "localising influence," such as is alluded to in the "Report on Quarantine"?

These cases took place, not only in the cleanest part of the town, but in the cleanest houses of the town; there was no crowding; indeed, in the first case, the fine, large, airy house was occupied by one person and two native servants. The weather was beautiful; there was no rain for nearly a month afterwards, nor was there anything upon which to build even the slightest supposition of the existence of any epidemical constitution of the atmosphere at this period.

To assume that these cases were merely sporadic cases,—mere messengers sent to announce the near advent of another epidemic, may be a very convenient formula for the Board of Health by which to account for cases they cannot otherwise dispose of; but such a mode of explanation will not, I imagine, carry much weight with the Profession.

8. It is entirely erroneous to state, that yellow fever was prevailing at Porto Praya when the Eclair arrived at Boa Vista. No such disease prevailed at Porto Praya at this period, nor are there any grounds for supposing that it existed there at any other period.

9. With regard to the outbreak of the epidemics, both as regards 1845 and 1846, most severe and fatal cases had occurred before any of the alleged atmospherical or other phenomena had appeared. It is also to be borne in mind, that *the so-called sporadic cases occurred only in persons who had been exposed to a source of contagion.*

10. The epizooty did not take place until the end of the dry season of 1846, when the fever had well nigh left the island. The epidemy on the island of Boa Vista commenced on the 12th October, in the person of Anna Gallinha. Anna Texeira, her son, Manoel Affonso, and others, living in the same neighbourhood, were attacked immediately afterwards.

At Rabil, the first case was Luis Pathi, about the 25th September, the disease attacking his family in the beginning of October. Manoel Fachina's wife, living next door, and visiting Pathi, was attacked at this time, and many others in the neighbourhood within a reasonable period from the arrival at Pathi. The exemption of the eastern villages, and of some of the other villages for some time, may be explained on the ground of their comparative little intercourse with Porto Sal Rey and Rabil, and partly also from the adoption of precautionary measures; but their exemption seems wholly inexplicable if the disease is to be attributed to a general atmospherical cause.

I think, then, that the whole of the "countervailing considerations" assumed in the *Summary*, at pp. 114-15, of the "Report on Quarantine," to be "admitted" facts, are, in every essential point, entirely destitute of foundation.

Such conclusions as those contained in this *Summary* could never, in my opinion, have been arrived at, had all the cir-

(a) Few, I imagine, will agree with Dr. King when he says, in his "Report," p. 7, "If the disease possesses the power of reproduction, its poison must have been as certainly communicated through the medium of fomites, as by direct contact with the sick on board, or at the fort."

(b) Some of the islands of the Cape de Verds have, within the last two years suffered from ague and remittent fever: but in no part of the documents in my possession regarding the disease, is there any sign of yellow fever mentioned. No case of black vomit occurred. In fact, the disease was perfectly amenable to common treatment. My friend, Mr. Thomas Miller, recommended by the Governor-General to the Portuguese Government for the decoration of the Order of the Tower and Sword, for his conduct during the sickness, took forty people from San Nicholao to St. Vinceut, during the height of the fever at the latter place. Nearly all were attacked; but one only, previously debilitated, died. The Consul, in his letter, states, "that no family nor person having the common necessaries of life, or the means of common treatment, died." Had the disorder been of the nature of yellow fever, those who had the means of treatment and the necessaries of life in greatest abundance, namely, the Europeans, as at Boa Vista in 1845-6, would have suffered most. But the very reverse of this was the case, for the blacks suffered most—nay, almost exclusively. The disease, in short, was maintained by exposure to vicissitudes of weather, and by starvation.

cumstances in the Eclair and at Boa Vista been fairly and impartially weighed. Nor do I believe, that they will be received by any one who will take into account the numerous mis-statements in the "Report on Quarantine," which I have pointed out and corrected, and the omission, in that document, of so many matters important to the elucidation of the truth, which I have taken leave to supply.

In my humble opinion, the history of the epidemy at Boa Vista comprehends every condition upon which the proofs of the infectionsness of a disease are supposed to rest, namely :—

The healthiness of the island before the arrival of the Eclair, with Yellow Fever on board.

The outbreak of the same disease among the inhabitants of the island within a reasonable period afterwards.

The immunity of distant villages for long periods until the arrival of infected persons, and the radiation of the disease in every district from infected foci.

The comparative immunity from the disease obtained by persons who adopted common but partial precautionary measures against infection.

The absolute immunity from the disease procured by persons who adopted strict measures of isolation and segregation.

Before closing this communication, I am desirous it should be distinctly understood, that none of the observations I have taken leave to make on the "Report on Quarantine" are intended to apply to either of the lay members of the General Board of Health whose names are attached to that document.

There is one passage, however, (that in which, at p. 101, the inhabitants of Boa Vista were charged with "giving their evidence under the strongest feeling of self-interest," to establish a claim for compensation," etc.,) to which I cannot help regretting that they should have given even an official concurrence.

The inhabitants of Boa Vista, consisting chiefly, in fact almost exclusively, of the negro and mixed races, badly educated, in a great measure destitute of the benign influence of religion, living on a wretchedly arid soil, with the curse of slavery as part of their social system, are, it is true, generally "poor and miserable;" but it does not follow, that, even under these adverse circumstances, all virtue in human nature should be supplanted by fraud and dissimulation. I was in every village, and I spent much time among the people; and I feel assured, they gave their evidence freely and candidly; and to charge them with exaggerating their statements from selfish motives, I feel to be as unjust as it is ungenerous.

It is to me a matter of deep regret, to find the honoured name of Lord Shaftesbury, connected as it ever has been with noble and philanthropic sentiments and feelings towards the lower classes, *whether black or white*, of all countries, giving even official sanction to so unworthy an insinuation.

As respects the medical member of the Board, he is no longer young; he is a respected member of a Profession honourably distinguished for its humane character and tendencies; and it is said that, at a former period of his life, he exercised a higher and even more sacred function. From such a quarter, one might have expected some degree of caution in giving countenance to an aspersion against a poor, but industrious and generous people, which, on further inquiry, he might have found to be wholly unmerited.

It is, however, consolatory to know, that the Government of this country were in no degree influenced by any such ungenerous views. A handsome sum of money was transmitted by the British Government to the distressed islanders, which, with the donations of provisions from Portugal, from the late Mr. Macaulay, from the English Consul, from the Messrs. Miller, of San Nicolas, and other benevolent sources, must have relieved much distress, and proved the saving of many lives.

Judging from what I saw in 1846, when distributing to famishing women and children the large amount of provisions brought me by Commodore Jones in H.M.S. Penelope, and the liberal supplies also sent from Sierra Leone and the Gambia, I feel satisfied, that the bounteous charity of the British Government was met by the blessings and the gratitude of the whole population of Boa Vista.(a)

Trinity-square, Tower-hill.

(a) Never was relief to a beleaguered and starving garrison more welcomely and thankfully received than were the provisions brought me by Commodore Jones, in H.M.S. Penelope. This bountiful and well-timed supply consisted of Rice, 210 large bags; Farinha de pao, 50 bags; Guinea corn, 50 bags; besides several boat loads of Yams.

I may, perhaps, be pardoned for yielding to the temptation to make the following extract from my private journal on the occasion of the first day's distribution of the provisions among the people:—

"With Dr. Almeida, the Mayor, Senhor Joao Baptista, and John Jamieson, employed the greater part of the day dealing out provisions to the people, who are in great want. It was a goodly sight to see their black, shining faces full of joy and thankfulness as they received their loads, varying in amount according to the number in the family. No Englishman could look upon this scene without being proud of his country. Thousands in this comparatively little known island are starving; no sooner is this known, than the gladdening hand of British generosity is at once extended to them. 1118 persons relieved this day. This is something to sleep upon."

ON THE MEANING OF THE TERM "ULCERATION,"

AS AT PRESENT APPLIED TO UTERINE DISEASES.

By T. SNOW BECK, M.D., F.R.S.,

Physician to the Farringdon General Dispensary and Lying-in Charity.

The conflicting opinions which have been expressed by practitioners as to the absence or presence of ulceration at the orifice of the uterus, appear only to be accounted for by referring to the different senses in which this word has been used. At first sight it appears strange, that two opinions should exist as to the meaning of a word the definition of which is so generally agreed upon; yet it is, nevertheless, certain, that in regard to the diseases of the uterus, it has been employed to denote morbid conditions which are very different from ulcerations, in the received acceptation of the term.

The definition given by all surgeons is essentially the same. Thus, for example, Boyer states: "an ulceration is a solution of continuity of the soft parts, more or less ancient, accompanied by a purulent secretion, and kept up by some local or internal cause;" and Samuel Cooper says: "Surgeons usually define an ulcer to be a solution of continuity in any of the soft parts of the body, attended with a secretion of pus, or some kind of discharge.(a) Authors on practical medicine and pathology likewise adopt a similar definition. Dr. Copland considers "ulceration is distinguished from suppuration chiefly by its being attended by a loss of substance, by a destruction of parts, and by a more or less abundant secretion of puriform, ichorous, fetid, sanious, or variously-coloured fluid."(b) Dr. Watson writes: "We may say, with Dr. Alison, that, whenever the absorption of the effused lymph, and of the surrounding textures, takes place in excess—in a greater degree, that is, and more irregularly than seems to be required for any useful purpose—the result is *ulceration*. The term is, however, commonly restricted to those cases in which the loss of substance occurs upon some *surface*, internal or external."(c) Dr. Williams defines an ulcer to be "a solution of continuity or excavation, the bottom and edges of which continue to discharge pus, or a serous fluid mixed with exudation corpuscles, and sometimes blood corpuscles."(d) Chomel states, that "ulcers are solutions of continuity maintained *(entre tenues)* by an internal or local disease.(e) Andral says, "The term ulcer is applied to that solution of continuity which is produced in a tissue by the absorption of its molecules.(f)

According to these definitions, to which many more might be added, the essential character of ulceration is a solution of continuity or excavation, or a loss of substance in a part; for it is evident, that the discharges which usually accompany this lesion are not characteristic of, nor essential to it, inasmuch as they are also products of simple inflammation of a mucous membrane. The accuracy of these definitions are confirmed by more recent observation of morbid phenomena by the aid of the microscope, which has shown, that, previous to ulceration taking place, the blood becomes stagnant, and adheres to the walls of the vessels, that the neighbouring tissues thus lose their vitality, by changes similar to what occur in mortification, and, being carried away by effused fluid, a solution of continuity, or loss of substance, is produced. To express this series of morbid changes in a short phrase, many pathologists define ulceration as "molecular death," or "molecular

(a) A Dictionary of Practical Surgery, p. 1304.
(b) A Dictionary of Practical Medicine, p. 377.
(c) Lectures on the Principles and Practice of Medicine, Vol. I., p. 164.
(d) Principles of Medicine, p. 300.
(e) Elemens de Pathologie Generale, p. 123.
(f) A Treatise on Pathological Anatomy. Translated by Townsend and West. Vol. I., p. 232.

gangrene." But this does not in any way alter the essential character of the previous definitions; for, when "molecular death or gangrene" occurs in any tissue, "a solution of continuity, or loss of substance" in that tissue is the inevitable result.

Admitting, then, that these definitions correctly express the essential character of ulceration, we may inquire, whether this term has been applied with propriety to many morbid states of the orifice of the uterus. At the late discussion at the Royal Medical and Chirurgical Society, Dr. Murphy is reported to have said: "A girl was admitted into the hospital (University College) dying from the effects of opium. At the autopsy, he had examined the uterus, and found an ulcer on both lips extending into the cavity. It was seen by the pupils, and was sent to the curator to be preserved, but the next day it had lost all its characters, and was thrown aside."(a) With all respect to Dr. Murphy's deservedly high standing in the Profession, and the personal esteem which must be felt by all who know him personally, I can only come to the conclusion, that some source of error must exist in this statement. A solution of continuity, or a loss of substance, on the lips of the uterus, would have been as readily recognised the day after the autopsy as on the day of the examination; and, if the supposed ulceration "had lost all its characters the next day," is it not certain that ulceration had not existed, and that some other morbid appearance had been mistaken for it? How could the loss of substance be repaired? And, if still present, it would have been recognised. I feel the greater confidence in speaking upon this subject, since I have carefully searched during some years for these reputed ulcerations in my own practice, and in the hospital practice of other physicians without being enabled to discover them. During this period, I have seen many cases of inflammation of the mucous membrane covering the lips of the uterus, and even extending into the cervical canal, which presented a red and granular appearance, and which had been designated ulceration, but wherein no loss of substance or solution of continuity existed. Sometimes the glands in the mucous membrane were chiefly implicated in the inflammation, and each being surrounded by a defined circle of redness, they presented, when grouped together, a circumscribed and defined granular patch, studded with minute pits or holes, which led to the orifices of the glands. In these cases, the pathological condition did not differ from that of chronic inflammation in other mucous membranes, as, for example, in the granular condition of the conjunctiva; in the state of the mucous membrane of the stomach, to which the name of mammillation has been applied, in the condition sometimes observed in the urethra of the male after gonorrhœa, etc. In these instances, there is no loss of substance in the membranes, nor has any one contended that ulceration was present; yet this name has been applied to the same morbid conditions when observed in the mucous membrane of the vagina, or in that covering the lips of the uterus. With this explanation, it can readily be understood, that an inflamed mucous membrane might lose its characteristic appearances the day after the autopsy, especially if it had been immersed in any fluid; but if a loss of substance or an ulcer had existed, that ulcer would have been as readily discovered the next day, as on the day on which the first examination was made.

At the same meeting of the Society, a letter was read from Mr. Holl, detailing the result of his *post-mortem* examinations, and bearing upon this subject. Dr. H. Bennet afterwards remarked: "That it appeared to him that Mr. Holl's guarantee for the correctness of his opinions was all that could be desired, as he was practically acquainted with the lesions to which that part is subject in the living state; that he had carefully examined the condition of the parts, and stated in his letter, —'The whole number of bodies in which the state of the uterus was examined was 44; of these, 34 either presented no disease of the cervix uteri, or only slight congestion, with the exception of 3, in whom the congestion was considerable. Of the remaining 10 cases, 9 of them presented more or less extensive abrasion of the epithelium from around the os uteri, but no ulceration. The pelvic veins were generally full of blood; the cervix uteri large, swollen, and puffy, with more or less venous congestion of the mucous and sub mucous tissues, but no induration or effusion of lymph into its texture. The glands of Naboth were enlarged, and the canal of the cervix blocked up with viscid mucus. The removal of the epithelium appeared to commence at the follicles which surrounded the cervix uteri.' Dr. Bennet, having read the letter, drew attention to the fact, that Mr. Holl, having a knowledge of these special lesions, and having specially investigated them in the autopsies, discovered 10 cases out of 44, or 37 per cent., in which there existed abrasion, or ulceration of the uterine mucous membrane.—conditions which he (Dr. Bennet) considered pathologically identical."(a) This, however, appears a perversion of Mr. Holl's words, who distinctly says, "there was abrasion of the epithelium, *but no ulceration.*" After lauding Mr. Holl's knowledge of these special lesions as offering a guarantee,—all that could be desired for the correctness of his opinions,—it appears a singular proceeding to ignore his knowledge, and contradict the opinion founded upon it. Would it not have been more consonant with the facts to have stated, Mr. Holl said he had found nine cases of abrasion of the epithelium, but no ulceration; yet this statement was erroneous, as, in reality, these were cases of ulceration? And that this conclusion was come to, in opposition to the former praise, because abrasion of the epithelium and ulceration were considered conditions pathologically identical. But is this the fact? Are these lesions pathologically identical?

The essential character of ulceration—that it is a solution of continuity or loss of substance in a tissue—has been sufficiently proved, and the pathological changes which occur have been also pointed out. In abrasion, or excoriation, the epithelial covering of the mucous membrane is removed, but the substance of the membrane itself remains uninjured. There is no solution of continuity, or excavation, or loss of substance in the part, and this constitutes the essential difference between the two lesions—abrasion, or excoriation, and ulceration. The pathological changes which occur are equally distinct. In ulceration, the blood becomes stagnant, adheres to the sides of the vessels, the vitality of the part is destroyed, molecular death or gangrene being induced. In excoriation, the blood flows on without interruption or stagnation; a portion of serum is effused beneath the unorganised epithelium, which, being detached, is subsequently removed. The changes which occur may be compared to the effect of an exceedingly minute and mild blister, active in its character, acute in its course; whilst ulceration is the consequence of minute mortification, usually slow in its action, chronic in its course. The difference between the two lesions, and the pathological changes which occasion them, thus appear to be well defined; but there is one point of view from which the two might be confounded. The first change occurring in a mucous membrane about to undergo minute gangrene is, in some cases, the effusion of bloody serum beneath the epithelium, and the subsequent desquamation of this part. And if we were to inquire no further into the changes going on, it might be concluded that, as there is desquamation of the epithelium in the beginning of the process of ulceration, and also in excoriation, that hence the two states are pathologically identical. But this would be a very superficial mode of considering the question. In the changes which produce ulceration, desquamation of the epithelium is not the only alteration which takes place in the membrane; for, after its removal, the surface appears livid and dark-coloured, the tissues having lost their vitality, and the vessels of the part being blocked up, as in mortification. But in excoriation, the separation of the epithelium is the first and only change which occurs in the tissues of the membrane, which, after its removal, appears red and florid, the vessels being pervious, and the blood circulating through them. Excoriations, then, are the consequence of inflammation of the mucous membrane, or, as some have expressed, of catarrhal inflammation, more or less acute; ulcerations are the results of molecular gangrene, or mortification, the sequence of disease extending into the deeper tissues of the organ. Thus, even from this point of view, it would be illogical and erroneous to consider these two morbid conditions as pathologically identical.

The importance of this subject is greatly increased when considered in relation to the treatment of the diseases of the uterus. From many communications I have received, I have no doubt that the idea of having so loathsome a disease as "ulceration" on the uterus, has induced many females to submit to the employment of the speculum, and escharotics; while the same term has been considered by practitioners as

(a) *Medical Times and Gazette*, Feb. 7, p. 144.

(a) *Medical Times and Gazette*, Feb. 7, 1852.

a justification for this mode of treatment. It is thus intimately connected with the proper or improper use of the speculum, in the treatment of uterine disease. Where ulceration really exists, which is very rare, unless it be specific ulceration, the local application of escharotics by the aid of the speculum, during the later stages of the disease, is, no doubt, an useful adjunct to the other means of cure; but when excoriation only is present, or a reddened and swollen state of the mucous membrane, conditions which accompany inflammation more or less acute, the employment of these therapeutical agents is not only improper, but frequently most injurious.

It appears to have been overlooked in the discussions on this subject, that neither excoriations nor ulcerations are, in themselves, the essential disease; but that they are merely symptoms or evidences of the existence of other diseases which have produced these morbid states. This is well shown in Mr. Holl's account of the morbid appearance, where "the pelvic veins were generally full of blood; the cervix uteri large, swollen, and puffy, with more or less venous congestion of the mucous and submucous tissues, but no induration or effusion of lymph into its texture. The glands of Naboth were enlarged, and the canal of the cervix blocked up with viscid mucous,"—distinct evidences of inflammation of the substance of the organ,—while "the removal of the epithelium, which appeared to commence at the follicles surrounding the cervix uteri," was but a sign of this inflammation affecting the glands imbedded in the tissues of the part. Viewed in this light, the application of escharotics to remove a symptom, whilst the disease producing it is unheeded, is undoubtedly not the correct course to pursue; nor can it be correct to endeavour to remove the symptom of acute inflammation of the mucous membrane—excoriation—by the application of substances which increase the inflammation already present. This mode of designating a reddened and swollen mucous membrane an ulceration, and including in one groupe diseases which are pathologically distinct, and which require opposite methods of treatment, has been productive of a serious amount of mischief in the treatment of uterine affections. Thus, in subacute inflammation of the mucous membrane of the vagina, where the membrane is red and swollen, and where the symptoms were, pain deep in the hypogastrium, pain on passing the fæces or urine, a mucous or purulent vaginal discharge, with pain across the forehead, and other constitutional symptoms, I have known the speculum employed, and the nitrate of silver applied, in consequence of the practitioner being misled by the idea that extensive ulceration existed. As might be supposed, this treatment was followed by great increase in the symptoms for several subsequent days, without any permanent advantage. On the other hand, in some exceptional cases of chronic vaginitis, which chiefly involves the upper part of the vagina, and where lotions have been inefficiently employed, either from inattention or want of management on the part of the female, the local application of strong stimulants has altered the morbid action, removed the thickened or mammillated condition of the membrane, subdued the vaginal discharges, and other symptoms. But these are only exceptional cases, and, by no means, form the general rule. Similar errors have been committed in respect to the diseases of the uterus itself. In cases of inflammation of the organ, the redness of one of the lips, or the red appearance of the lining mucous membrane, have been treated by the application of escharotics, and followed by much augmentation of the inflammatory action in the deeper tissues. Even in those cases where ulceration, or a loss of substance, has really existed, much injury results from concentrating the attention too much upon this lesion, and neglecting the diseases or morbid states to which it owes its origin. What surgeon would think of applying powerful local applications to an ulcer on the leg, in the expectation of curing it, until he had first removed the state of the venous circulation upon which the continuance of the ulcer depends? Yet this is exactly what has been continually done in the treatment of the diseases of the uterus.

These principles were well expressed by Professor Dubois, during the discussion before the Academy of Medicine at Paris, in 1850:—"The value which has been given by one of our colleagues to ulcerations, if this were real, leads to consider them as one of the local conditions the most worthy of attention in practice. I cannot, for my part, adopt this manner of view; according to my appreciation, these lesions, as well as 'engorgements,' are only consequetive phenomena of another alteration (inflammation) which has preceded them, and have in general, in regard to the symptoms and treatment, but a secondary importance," *Bulletin*, p. 225.

9 A, Langham-place.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

LONDON HOSPITAL.

By NATHANIEL WARD, Esq., F.R.C.S.

EXTENSIVE NECROSIS OF THE RIGHT FEMUR—EXCISION OF PART OF THE SUBSTITUTE BONE—REMOVAL OF A LARGE SEQUESTRUM—RECOVERY.

A lad, aged 16, came under the care of Mr. Luke, with extensive disease of the right femur. The entire shaft was much enlarged, and the soft parts immediately surrounding it felt dense, and yielded but little on pressure. There existed three sinuses leading down to the bone: one at the upper third of the front of the thigh; another at the outer side, a little above the middle; and the third two inches above the knee-joint. All of them gave free exit to thick pus, which came away, however, more freely from the lowermost. A probe introduced through the lowermost opening led down to dead bone, which seemed to yield somewhat, on pressure being made by the instrument, which could be passed somewhat in front and somewhat behind the bone. There were cicatrices of several other abscesses that had formed at different periods, on the front of the thigh, and in the popliteal region. The patient stated, that five years ago he had, while bird-nesting, fallen from a tree, and shortly afterwards a boy gave him a kick in the right ham. An abscess formed gradually and broke. It healed in about seven or eight months. Four months after this another formed at the lower and outer part of the thigh, which has never healed. The formation of the latter was soon followed by others in different parts of the limb, the greater part of which, however, soon cicatrised.

The patient having been kept quiet in bed, with the limb somewhat elevated, and having been placed on a generous diet for the space of three weeks, was brought into the operating theatre, and placed under the influence of chloroform. A director was introduced through the sinus, at the lower and outer part of the thigh, down to the bone; a long, narrow, and strong scalpel was passed into the groove, and an incision three inches in length, almost vertical in direction, was carried upwards; the director was then removed, and the incision prolonged downwards to the extent of an inch through the lower part of the sinus. The soft parts were now held back by two bent spatulæ, and when the smart hæmorrhage that came on after the incision of the soft parts had so far subsided as to admit of the substitute bone being exposed to view, Hey's saw was applied to it to the extent of about two inches. The new bone having been divided longitudinally to this extent, a lever was inserted, and, by several applications of it, enough of the new bone was removed to expose the necrosed portion. Its lowermost extremity was impacted in the cancellated structure below the level of the incision made by Hey's saw. The sequestrum was therefore cut in two portions by a pair of Liston's forceps; the upper portion was seized, and, by powerfully drawing it downwards and rotating it somewhat at the same time, was removed from the interior. The lower fragment was next removed by pulling it upwards and rotating it at the same time. The sequestrum altogether measured about six inches in length, was about half an inch in diameter, and had the ordinary worm-eaten appearance of similarly situated necrosed bone. The wound in the thigh was lightly dressed with wet lint, and the limb placed on an inclined plane. Considerable constitutional disturbance came on after the operation, and lasted for about four or five days. On its subsidence, the generous diet which the boy had had on his admission was resumed, the wound took on a healthy healing process, and he left the hospital on the seventy-ninth day after the operation, the wound having all but healed.

NECROSIS OF THE RIGHT FEMUR—EXCISION OF PART OF THE SUBSTITUTE BONE—REMOVAL OF SEQUESTRUM—RECOVERY.

Case 2.—A fisherman's son, a pale, weakly-looking lad, aged 14, came under the care of Mr. Luke. There existed at the inner and fore part of the lower third of the right thigh a sinus leading down to dead bone. The shaft of the bone was much thickened at the middle and below it. The boy stated that he was quite well fifteen months ago, when a boy gave him a kick. No pain followed the

injury except immediately after its infliction; but two or three months afterwards a large abscess formed at the lower and inner part of the thigh, when he was on shipboard in Holland. He came home, and went to the Dreadnought Hospital, where the abscess was opened. He remained in that hospital nineteen weeks, and came shortly afterwards to the London Hospital, under the care of Mr. Luke, under whose treatment he remained for five weeks; he was then discharged for a short time, as it was thought that the sequestrum was not at that time sufficiently advanced to admit of any operation for its removal being attended with success. He was re-admitted in between five and six months' time again, under the care of Mr. Luke, who handed the case over to Mr. Critchett. Having remained quiet in the hospital for about three weeks, the patient was placed under the influence of chloroform, and Mr. Critchett proceeded to the removal of the sequestrum. An incision two inches and a half long was made down to the bone, commencing from the sinus which led to it, and continuing upwards and outwards, so as to get away as much as convenient from the vicinity of the femoral vessels. Another incision, an inch long, and transverse in direction, beginning from the commencement of the first, was carried through the soft parts outwards. The triangular flap thus circumscribed was reflected, and the shaft of the bone exposed. A piece of necrosed bone, equal in size to a sixpence, irregular and jagged in outline, was removed from the surface of the shaft, the substitute bone being here deficient. The chisel and mallet were applied to the substitute bone, external to this necrosed portion. A piece of the former was removed, and the sequestrum brought to view. This was extracted, after it had been cut into two pieces by the bone-forceps; but, being more friable than the sequestrum in the preceding case, the two fragments broke in extraction, and several applications of the forceps were required for the complete removal of the dead portions. After the sequestrum had been taken away, a cavity existed in the centre of the shaft, extending two inches upwards, and into which the lower two-thirds of the index-finger could be inserted. The cavity extended downwards about an inch. The hæmorrhage which, during the steps of the operation had been considerable, subsided shortly after the removal of the sequestrum, and the wound was lightly dressed with lint soaked in warm water, and oiled silk. Secondary hæmorrhage, to a slight amount, occurred after the removal of the patient to bed. The wound was lightly poulticed for several weeks, the granulation process quickly took place, and in two months the wound had cicatrized, having latterly been dressed with a weak iodine lotion.

NECROSIS OF THE TIBIA AFTER FEVER—EXCISION OF SUBSTITUTE BONE—REMOVAL OF THE SEQUESTRUM AT THREE DIFFERENT PERIODS—RECOVERY.

Case 3.—A lad, aged 16, came under the care of Mr. Curling, having, a month prior to his admission into the hospital, been attacked with fever. During his progress to recovery from it, a large abscess formed in the right leg, in consequence of inflammation. He was then under the care of Mr. Wordsworth, who opened the abscess, and recommended the patient's removal to the hospital. On his admission, he was pale, feeble, and emaciated. The right leg presented several sinuses, freely discharging pus, along the course of the tibia. These sinuses led down to dead bone, which, however, gave no evidence of being loose. A barely appreciable enlargement of the limb existed. Under treatment, the patient's health gradually improved, and, with this improvement, the discharge from the sinuses lessened.

In about six weeks from his admission, the tibia was observed to be gradually enlarging, and at the end of the third month had attained a great size, accompanied with pain in the limb, increased on pressure, and a dark red appearance of the skin of the lower half of the leg, and a diminution of constitutional power. About a fortnight after this, one of the fistulæ at the middle of the leg took on the character of a sloughing sore, and was treated by the free application of nitric acid and subsequent poulticing. Morphia at night time, sarsaparilla with dilute nitric acid, and wine, during the day, were given internally. In about ten days, the wound had assumed a healthy granulating surface, a thin scale of bone having previously separated. Shortly after this, a similar process supervened in one of the upper fistulæ, and the patient's health sensibly gave way. At the end of the sixth month from the commencement of the disease in the tibia, Mr. Curling removed part of the sequestrum. The boy having been placed under the influence of chloroform, and the anæsthetic effect having been kept up by ether, a flap of the skin, including the granulating sore in the middle of the leg, was reflected. A large triangular piece of the substitute bone was removed by Hey's saw, and the necrosed bone exposed. It was divided by the forceps, and portions of it were separately removed by the elevator and forceps. The greater part of the sequestrum, however, was so firmly imbedded, that it was deemed advisable to postpone its entire removal. The wound was dressed with lint and warm water. In the course of three months the large wound in the leg had healed.

About five months after the first operation, a second was had recourse to. The boy was again placed under the influence of chloroform and ether, and a free crucial incision was made over the upper part of the tibia, and with Hey's saw some thick pieces of substitute bone were removed. A large sequestrum was extracted, forming at one part the whole calibre of the tibia. The second operation was more severe than the first, and from it the boy's constitution apparently suffered a good deal. Three months after it, the wound had all but healed, and the patient had become quite robust and healthy in appearance, having been sent to the sea-side for eight weeks. A week after his return, a third operation was had recourse to, and a necrosed portion of bone extracted, three inches in length, in two fragments, an oblong piece of the substitute bone, two inches and a quarter long and half an inch in thickness, having previously been taken away by Hey's saw. The wound soon took on a healthy character, and had quite healed in three months. The patient left the hospital cured, in the sixteenth month after his first admission, and he has at the present time a very useful leg, which has become reduced to the same size as the unaffected one.

Remarks.—The above cases belong to a class particularly interesting to the surgeon, inasmuch as by a timely and skilful operation, a limb, which had possibly been useless for years, is soon restored to its original functions, and the patient withdrawn from a danger which threatened sooner or later to produce a serious effect on his constitutional powers.

The period at which an operation should be undertaken for the removal of a dead portion of bone, when enclosed in a canal of substitute osseous deposit, is clearly more difficult to determine than when necrosis has taken place without such new deposit existing. In the latter instance, the looseness of the dead portion can easily be detected, and by the aid of the forceps and a division of the soft parts and sinus leading down to the dead bone, can be as readily removed, being usually small in extent and superficial in position. In the former instance, the necrosed portion becomes so intimately impacted in the deposit of new bone, that it is very difficult, if not at times impossible to detect that the dead portion is loose by a probe, steel director, or other instrument passed down through one or more cloacæ that communicate with it. Generally, however, when the process of necrosis is quite complete, the fibrinous deposit, which intervenes between the dead and living portions, and which admits of yielding somewhat on pressure being made on it through the medium of the sequestrum, comes in aid of the diagnosis. An experienced and educated hand will not unfrequently be able to detect this yielding, which might not be made out by one less expert. It constitutes a valuable symptom, and, when taken in conjunction with copious discharge and considerable development of the substitute shaft, sanctions at once the propriety of an operation.

The third case presents many points worthy of attention. The patient had originally been healthy; the disease came on in the tibia after an attack of fever, and was very acute and rapid in its course. The formation of the substitute bone took place with almost equal rapidity, and, at the third operation, was half an inch in thickness. The effect of this rapid development of new bone was very remarkable; for, at the commencement of the increase in the volume of the limb, a state of active inflammation supervened in the superficial parts, leading to the formation of several sloughing ulcers; this condition appearing to depend on a great degree of tension, brought about by the infiltration of the soft parts between the integument and the bone. To relieve this condition, it became necessary to deviate from general principles, and to perform the operation for the removal of the dead bone before the process of separation from the living was complete; and by three distinct operations, judiciously had recourse to at most favourable periods, nearly the entire original shaft of the tibia was removed, and the patient made a quick recovery, with a useful limb.

PUBLIC DISPENSARY, CAREY-STREET.—At the anniversary dinner of the Governors of this Institution, held lately, His Royal Highness the Duke of Cambridge in the chair, the report stated, that since its establishment in 1782, the total number of patients admitted was 225,688, of which upwards of 45,000 had been visited at their own homes. The average yearly number was 6,000, 1-6th being attended at home. The removal of the Dispensary from Bishop's-court had caused an expense of 360*l.*, and a debt of 700*l.* has been incurred. A subscription on behalf of the Charity was entered into in the room.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening,	May	29.—Royal Institution. *Subject:*—Prof. Faraday, "On Points Connected with the Non-Metallic Elements." Three o'Clock.
——	——	Medical Society of London. *Subject*:—Dr. Merriman, "On Artificial Dilatation of the Os Uteri. Eight o'Clock.
Monday,	May	31.—Royal Institution. *Subject:*—J. Conolly, M.D., "On Insanity." Four o'Clock.
Tuesday,	June	1.—Royal Institution. *Subject:* — E. Lankester, M.D., "On the Physiology of Plants." Three o'Clock.
Wednesday,	June	2.—Royal Institution. *Subject:*—J. Conolly, M.D., "On Insanity." Four o'Clock.
Thursday,	June	3.—Royal Institution. *Subject:* — R. Westmacott, Esq., R.A., "On the History and Practice of Sculpture." Three o'Clock.
Friday,	June	4.—Royal Institution. — *Subject:* — Scott Russell, Esq., "On English Ships and American Clippers." Half-past Eight o'Clock.
Saturday,	June	5.—Royal Institution *Subject*:—Prof. Faraday, "On Points connected with the Non-Metallic Elements." Three o'Clock.

Medical Times & Gazette.

SATURDAY, MAY 29.

BETHLEM HOSPITAL.

The more we hear of the contemplated changes in the *ménage* of this Institution, the more confidently are we confirmed in our opinion. The correspondence of the Physicians shows that, notwithstanding the quibbling, and air of mystery with which the Governors surround the matter, the Sub-Committee, and their primitive system of management, are the real objects of the Commissioners' censure.

The restriction placed by the Secretary of State as to the circulation of the evidence taken before the Commissioners appears at first sight to be a matter of hardship to the Physicians; for their retirement subsequent to the inquiry is almost compelled, although, the Governors say, not in consequence of it. On the other hand, it may be said, and not without justice, that the evidence containing nothing to inculpate them, its limited circulation among the Governors and their Sub-Committee must not be deemed so unfair as it would seem. We hope, however, that it will yet be obtained from the authorities, and made public.

We have heard, that the Commissioners' remonstrance to the Governors has shaken in their seats some prominent officials. During the inquiry, rumour was rife, that the worthy Treasurer anticipated the necessity of seeking once more the peace and calm of country life; but reminiscences of his comfortable official dwelling, and its sweet contingencies, gave him fresh courage; and, with his companions of the Sub-Committee, he determined to avoid dismissal by submitting to the Commissioners, confessing long abuses of privilege, and promising future amendment.

We are not altogether uninformed; and we know that the chief point upon which the Commissioners insisted was the insufficiency of the present management to obtain for the Institution its legitimate objects. The system of Visiting Physicians was condemned, but not the Physicians; the accumulated duties of the resident officer, rendering useless all his efforts fully to perform them, did not escape without reproof; and the paltry and niggard parsimony of the Sub-Committee, in not allowing a proper number of efficient attendants to watch over the wants and necessities of the unfortunate patients, was a special object of inquiry.

To this latter cause are to be attributed the many accidents which have occurred in this establishment,—the escapes, and several suicides; and to this, also, are to be ascribed the many complaints of harshness and ill-treatment which have called for the Commissioners' interference.

Whoever is conversant with modern establishments for the insane, will be surprised that Bethlem is only old Bethlem improved, and not what Bethlem ought to be in 1852. Who could walk along its galleries, and not be struck with its gloom and chilling dulness? Who has visited its dark and prison-like, its ill-warmed and whitened cells, and not felt that improvement was necessary? What rays of sunshine gladden and cheer its desponding and unhappy inmates? All this was not unheeded; and, if report be true, the old wooden, rough bedsteads, with their canvass bags of straw, coeval with Moorfields, were not unnoticed by the Commissioners. The old prison window, the absence of proper airing courts, and the judicious division and separation of patients, the ill-divided jurisdiction and authority of the physician, the steward, and the matron, were alike subjects of animadversion, and, we hesitate not to say, just yet gentle reproach.

We feel fully convinced, that it is for the proper digestion and consideration of these vices and evils, and the miseries which must have resulted from them, that the Secretary of State has chosen to limit the circulation of the report. May its private examination produce a good effect! May the Sub-Committee listen to, and practise, the various wise suggestions which the new superintendent will doubtless offer; but which, coming from their Physicians, were unheeded! May they be taught to know that words of wise counsel and cheering comfort, poured by a judicious attendant into the ear of the miserable maniac, may dispel his delusion, and restore distracted reason to her once calm throne!

No men of mark, however, have as yet *publicly offered* themselves for the new appointment at Bethlem. We observe, by the Daily Press, that Dr. Wood, *now* resident there, is a candidate; also Dr. Hood, of Colney Hatch, who advertises himself as "a married man, with four children." As a relative of some city officer, he is spoken of as likely to be appointed,—spoken of, we say, for the day has gone by when nepotism, even with a wife and four small children, can command sweet voices and support.

But, to do justice to the Governors, and to their avowed intention of choosing the best man they can get, we are glad to understand that the appointment has been suggested to Dr. Browne, of Dumfries—the Conolly of Scotland, as the institution over which he has long so ably presided is the Hanwell of the Sister Kingdom. Dr. Browne's "reports" have always struck us as being of the highest order; he has done much towards arriving at a sound knowledge of insanity and the rational treatment of the insane; his asylum —the Royal Crichton Institution—is the admiration of all who visit it, and the model upon which all similar establishments should be conducted. As a lecturer and teacher, Dr. Browne is only second to, if he does not equal, Dr. Conolly himself; he has proved himself fully adequate to the duties of the new appointment; and if Ambition, that rabid mother of many woes, will bring him to London —for that which he now holds is pecuniarily equal to that which is offered—we know no one worthier than he to rule at Bethlem. Dr. Browne is one of those whose antecedents in lunacy entitle him to claim the highest rewards that department of the Profession has to bestow.

Mr. Hill, the excellent originator of the non-restraint

system, has also worthily been pointed out for the post. To him the cause of humanity owes many debts; but, to whomsoever the appointment may be given, we envy him not, if all that is said be true of the duties he will have to encounter. His will be no easy place; from the chapel to the kitchens and the laundry, all is to be supervised by him; the duties of the matron, too, are to fall to his lot, for, in the midst of the turmoil, she, too, has resigned.

But, even with the best man that can be induced to accept the new appointment, the staff will still be wholly insufficient for its purposes, and the coming change will leave matters much as they have hitherto been. Out of the extraordinary tables which grace the "General Report,"—some amusing, some ludicrous, and a few of an instructive character,—we find one stating the daily average number of patients contained in the Hospital—curables, incurables, and criminals—amounts to 359. The future Medical Superintendent will have to inspect each of these patients *daily*, and at night to make surreptitious visits. He has, moreover, to keep the books, record the cases, and manage the servants. The 24 hours consist of 1440 minutes; now, giving two minutes to each patient, no very long time, we leave the unhappy superintendent a surplus of 722 minutes; of which, at least 359 will be occupied in traversing long galleries,—Dr. Hood, in this way, is said to walk at Colney Hatch nearly twenty miles a-day;—he must have two hours in the twenty-four for meals and rest, leaving a residue of 243 minutes, or four hours three minutes, for sleep, case-taking, book-keeping, the aforesaid nocturnal visits, and attendance upon the families of the officers attached both to Bethlem and the house of occupation. He must also be present at *post-mortem* examinations; and, as this is often a lengthy affair, the performance of his duties will become utterly impracticable.

We presume, the apothecary will enjoy a light and genteel business in preparing, dispensing, and administering medicines. The extraction of teeth, the administration of enemata, passing catheters, and keeping accounts, will, we presume, sufficiently occupy his leisure moments.

The establishment of a school for the study of diseases of the brain, and of the different forms of insanity, will, after a time, rectify many of these evils; inasmuch, as from the more proficient students, clerks or assistants may be selected, who will materially lighten the labours of the superintendent. It is worthy of remark, that the authorities of Bethlem have for many years set the example, now followed by most other public hospitals, of having the *post-mortem* examinations of the patients who die in the hospital conducted by one special officer, namely, the present distinguished surgeon. There is, consequently, a valuable record of autopsies, which have formed the basis of Dr. Webster's Report, printed in the "Transactions of the Royal Medical and Chirurgical Society."

We trust that, in the selection of the Superintendent, the Governors will not think it necessary to require either an *old* man, or one whose sphere of observation has been long limited by the dull brick walls of an asylum. If old, he is physically unfit for his work. If simply a keeper of a madhouse, he has, in all probability, been in a great measure severed from his Profession, and is deficient in that scientific and extended view of mental diseases necessary for their proper interpretation and treatment.

We cannot, upon the whole, help thinking, that it will be a wiser plan to select some man, about 30, who has distinguished himself in the London schools—we could name half-a-dozen such—and place him in Bethlem, rather than one old in insanity, and bigoted, probably, to his own opinions. Never mind his want of experience,—to what does the experience of the man who has lived long years in an asylum amount? Himself a learner, he will be better able to teach; and, coming without prejudice and preconceived notions, he is the more likely to render Bethlem all it ought to be.

There are many interested in the results of these proceedings. The East India Company has required that their Medical Officers shall study insanity before entering the service. The same regulation must soon be followed in the Queen's service; consequently we expect, ere long, that there will be a no inconsiderable class of students ready to avail themselves of the very large field of observation which Bethlem Hospital, with its curables, incurables, and criminal lunatics, is especially calculated to afford.

However, we have great confidence in Sir Peter Laurie, Mr. Northall Laurie, and Dr. Webster; and we are inclined to anticipate that the appointment, when made, will call for the unanimous approbation of the Profession.

PROVINCIAL CORRESPONDENCE.

IRELAND.

PATHOLOGICAL SOCIETY OF DUBLIN.

The last meeting of the Society for the session 1851-52 was held in the anatomical theatre of Trinity College, Dublin, on the 24th ult.; Sir Philip Crampton, Bart., Senior Vice-President, in the chair. The labours of the Society were brought to a close with the delivery of an address by the Chairman, on the occasion of presenting the Society's gold medal, for the first time, to the author of the best essay on a subject selected by the Council. In a former Number we announced, that the subject chosen for this year's competition was, "The Pathology of the Venous System;" and we have now the pleasure to state, that the medal has been awarded to Mr. John Barton, whose paper, under the fictitious signature of "Tandem," was, after a rigorous scrutiny, ascertained to be the most meritorious; it contained, not only a *résumé* of the opinions of the classic authorities on this difficult subject, but gave abundant evidence of the zeal and industry of the writer in the many valuable cases occurring during his hospital practice, which were given with much lucidity of arrangement and accuracy.

Sir Philip Crampton said, that it gave him very great satisfaction indeed to be made the organ of the Society on such an interesting and important occasion; and, though the Society since its projection and establishment by Drs. Stokes and Smith in the year 1838 had done much, not only to raise the character of the Dublin School, but also to promote the study of pathology in other cities, by the example of its successful working, he considered, that not among the least of its claims must be reckoned the great advantages which it afforded to the student of witnessing the results of disease on such a large scale. He would also call attention to the facilities which the recent arrangements of the Council had afforded to pupils, all the Society's meetings being freely open, and an honorary testimonial being granted to all students for regular attendance. He trusted that the honour which had been that day conferred on Mr. Barton, was but a presage of more important distinctions still in store for him; and in decorating him with the first gold medal of the Dublin Pathological Society, he felt assured he did not go too far in saying, that the possession of such a prize would insure him higher success in his professional career than the largest patronage or private influence.

QUEEN'S UNIVERSITY IN IRELAND.—IMPORTANT DECISION IN REFERENCE TO THE DEPARTMENT OF ANATOMY, DURING THE VISITATION OF THE QUEEN'S COLLEGE, CORK.

The first visitation of this College was held on Tuesday, the 11th of May, at the hour of one o'clock. The visiters present were, His Grace the Lord Archbishop of Dublin, the Right Honourable Baron Greene, the Lord Bishop of Cork, Cloyne, and Ross, the President of the King and Queen's College of Physicians in Ireland, (Dr. Wm. F. Montgomery,) the President of the Royal College of Surgeons, (Mr. Trant,) the Right Honourable Maziera Brady, Ex-Lord Chancellor of Ireland.

The President of the Queen's College, Cork, Sir Robert Kane, M.D., reported, for the information of the visiters, that in general the progress of the College had been exceedingly satisfactory; he

had had but little reason to complain of the conduct of the students; the infractions of discipline which had occurred having been of a trivial character; and in the professional circle harmony had existed, with the exception of certain instances on which he would not immediately dilate, as they would be brought before the Board of Visiters in due form. In reply to a question from His Grace the Archbishop, Mr. Albani, the registrar of the College, stated, that the number of students on the College books amounted to 147.

A memorial was read from Professor Benjamin Alcock, complaining of certain acts of the President and Council which had reference to the anatomical department under his charge, and which he conceived militated strongly against his interests and privileges, as in his opinion defined by statutory provisions.

Mr. J. D. Fitzgeral, Q.C., appeared for Professor Alcock, and begged to premise to the Court, that the question about to be submitted to them was entirely one of law. It appeared, that Dr. Alcock had been appointed Professor of Anatomy and Physiology by the Crown, in whom alone is vested the right to appoint a Professor. He believed that it would not be denied, that Dr. Alcock had been statutably appointed Professor of Anatomy and Physiolgoy; but the question for the Court to decide was, whether, as Professor of Anatomy and Physiology, he was not entitled to teach the course of Practical Anatomy also. From the opening of the College, in 1849, up to the prerent time, Dr. Alcock's memorial stated, that no Professor had been appointed to teach Practical Anatomy, and that being the case, and he being the statutably appointed Professor of Anatomy and Physiology, Counsel contended, that Dr. Alcock was entitled to teach the course of Practical Anatomy, and that the Council of the College had no right or jurisdiction to appoint any Professor in that department. Dr. Alcock further stated in his memorial, that certain professorial fees were, in accordance with the statutes of the College, paid by the students; and he further stated, that he had received fees from the students for the course of Anatomy and Physiology, and the course of Practical Anatomy, until the month of Dec, 1851, when certain resolutions were passed by the Council, under the advice and sanction of the President. The first resolution declared, that the department of Practical Anatomy should be conducted by a Professor of Anatomy and a Demonstrator appointed by the Council, and who should be under the control and supervision of the Professor. Here the Court would see, that Practical Anatomy was treated as a separate and distinct department, which was not to be under the control of the Professor of Anatomy and Physiology, but was to be conducted by a Demonstrator appointed by the Council. This Dr. Alcock, although most willing to appoint a Demonstrator of Practical Anatomy, (which he had already actually done,) objected to, as he denied the right of the Council to appoint any Professor, or to impose upon or relieve any Professor from the duties delegated to him by virtue of his appointment. The second resolution, in fact, vested in the Council the right, if it so chose, to appoint a Demonstrator; and the third was to the effect, that such Demonstrator should be paid out of the fees from the students of Practical Anatomy. Now, the memorialist contended, that no Professor or Demonstrator has a right to be paid out of the fees which the statutes give to him, and to him alone. Counsel dwelt at length on the various points of the case, and the bearings of the statutory provisions thereon, and cited the wording of the Charter in evidence of the justness of memorialist's claim; the practice of other institutions was also adduced, and more especially the usages of the anatomical department of the Dublin University.

The President urged, in reply, that, as it had been admitted by Counsel, that Her Majesty's Government had a perfect right to appoint a Professor of Practical Anatomy at any moment they deemed fit, the question was much simplified. It was in consideration, that no statutory provision existed whereby Dr. Alcock could fill the Chair of Practical Anatomy; that the College authorities had felt justified in taking the steps they did; and, for the better and more efficient management of the College, as well as for the benefit of the medical students, they appointed one who, though not statutably recognised as Professor, not having received his appointment from the Crown, was yet fully competent to undertake the duties which devolved on him. It was true, that, in the several documents adduced in evidence, Dr. Alcock had been styled Professor of Practical Anatomy, which, however, arose from a wish to put Dr. Alcock in a leading and prominent position, and from feelings of courtesy and kindness towards him.

The President adduced many further arguments, and explained how, likewise, difficulties would arise with regard to the recognition of the College certificates by the various licensing bodies, whose Boards refused to receive testimonials on more than one subject from the same Professor.

The visiters retired for half an hour, and, after consulting together, the Right Hon. M. Brady proceeded to deliver the judgment of the Court. The visiters admitted that a difficulty did exist with regard to the performance of the duties of the anatomical departments. But it would certainly appear, though not precisely so stated in the statutes, that the Professor of Anatomy and Physiology was the most proper person to have charge of the practical anatomy department, as the Professor of Chemistry would be the appropriate person to have charge of the department of practical chemistry. The course of proceeding in the University of Dublin likewise very much fortified such a view of the matter. Seeing that the Charter contained the names of subjects exceeding the number of the professors, and that it contemplated the delivery of a course of lectures upon those subjects by the professors only, it would appear that the Charter contemplated that some one or other of the professors should be the person to undertake these duties; it was, therefore, to be understood, that the delivery of the course of lectures upon practical anatomy would fall upon the Professor of Anatomy. The Charter assumed, that more than one course of lectures might be delivered by some of the professors; and if that were the case, and that, by reason of any allocation of a certain course not specially appointed to any Professor, the duty fell upon the person in the same range of study, he would be the person, *primâ facie*, entitled to receive the fees for such course of lectures. It would appear, therefore, that whatever assistance Dr. Alcock might require should be a matter for his own arrangement and for his own profit. There was no power in the College to appropriate the fees in any other way, for, if they received them, they had only one duty to perform, namely, to hand them over to the Professor who performed the duties of the department. It was another question, as to whether such an arrangement would be for the benefit of the College; but they (the visiters) were bound by the statutes, and, according to them, they should decide in favour of Dr. Alcock; and, as to the difficulty of this arrangement clashing with the arrangement of other institutions, it could be easily met by applying to the Crown to appoint a separate Professor of Practical Anatomy.

On the day following, some subjects connected with the arrangements of the Faculty of Sciences were brought before the Visiters; after which they inspected the museums, library, etc., and expressed themselves much pleased with all that related to the internal economy of the College. The Visitation then concluded.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. Hodgson, Esq., F.R.S., President, in the Chair.

A CASE OF HÆMORRHAGE FROM INVERSION OF THE UTERUS,

IN WHICH THE OPERATION OF TRANSFUSION WAS SUCCESSFULLY PERFORMED: WITH REMARKS ON THE EMPLOYMENT OF TRANSFUSION GENERALLY.

By JOHN SODEN, Esq., Surgeon to the Bath General Hospital.

The author begins by expressing his belief, that the evidence in favour of transfusion is not generally known, and that false notions prevail with respect to its dangerous character. Having had an opportunity three years ago of proving its power, he was induced to examine into the results of all the recorded cases, and has presented a table of thirty-six in which the operation was performed in connexion with the puerperal state. The thirty-sixth case was that in which transfusion was performed by himself. A lady was delivered of her third child rapidly, and the latter pains were so severe that the uterus was violently emptied of its contents, and became inverted; a gush of blood ensued, and the patient fainted. The placenta was detached, and the uterus returned; no further hæmorrhage took place. In half an hour the patient had not rallied, and was insensible, cold, pulseless, and exsanguine in appearance; the breathing was at long intervals, stertorous, and jerking. She could just swallow stimulants by teaspoonsful at a time, and every other means were used to restore her. After about an hour she became, however, worse; was no longer able to swallow, and the respirations became more rare and stertorous. Transfusion was then had recourse to. The opening was made in the external cephalic vein, and blood drawn from the husband was injected by means of an ordinary syringe of German silver, with a detached stop-cock, previously well warmed. At first the blood would not pass, but returned through the opening in the vein; presently the opposition, from the contact of the coats of the vein, seemed to give way, and the blood, though impelled by a steady and moderate

pressure, rushed rapidly up the vein. The effect was instantaneous; a convulsion seized the whole frame, and the muscles of the face were frightfully distorted: not more than an ounce was injected. The convulsion soon passed off, and the patient gradually recovered; it was full an hour before any pulse could be felt at the wrist, and she did not recover consciousness till the following morning. During that time stimulants were continually given; she remained for some time in a weak condition, but has since had another child, and is now doing well. The author then proceeds to analyse the table of cases, which shows, that out of 36 cases, 29 were recovered from imminent danger, and it does not appear that in the fatal cases death was due to, or hastened by, the operation. In two, it may be presumed that death had occurred before the operation was performed; in a third, only a small quantity of blood could be procured; in a fourth, no effect; in the fifth, there were marked but not permanent effects; in the sixth and seventh, the women were too much reduced to be restored. The author considers the influence of the blood injected not to arise from the mere mechanical effect on the heart, but from a direct stimulation of the nervous system, and that the rapidity of the effect is modified greatly by the circumstances of the case, as regards the previous duration and cause of exhaustion, and by the character of the means used, as regards quantity, quality, and the mode of operating. With regard to quantity, it appears, that a less amount was needed in proportion as the exhaustion arose from the suddenness, rather than the amount of the bleeding. The author thinks, that some cases have been lost from a fear of introducing too much blood, the dangers of which, he thinks, have been over-estimated. The quality of the fluid he regards as of great importance, and he alludes to the impropriety of using the blood of the lower animals. The blood need not be drawn from one individual only; that drawn from many may be taken, but it should be the blood of healthy persons. The want of success attending Dr. Simpson's cases of saline injection in uterine hæmorrhage he attributes to the nature of the fluid used, while the same fluid might be serviceable in cholera, where the quality as well as quantity of the blood is interfered with. With regard to the mode of performing the operation, the author believes, that a simple syringe, with a detached stop-cock, plated or tinned on the inside, and capable of holding about three ounces, is the best instrument. The more complicated instruments constructed to guard against the admission of air, he considers needless, as the danger is an imaginary one. In one case the operation was successfully performed with a common toy syringe. The operation should, however, be performed at the arm or in some distant vein, in preference to the neck, where there might be some risk from the entrance of air. The convulsions which arose in the author's own case, he attributes, not to any irritating quality in the blood injected, but to the transition of the patient from a state of coma to that of syncope; the same thing was noticed in one case three times on the exhibition of stimulants only, and before transfusion was performed. The author then proceeds to notice the opinions of writers on the subject of the treatment of uterine hæmorrhage, and concludes by making a few remarks on the general application of transfusion, which has been equally beneficial in cases of hæmorrhage from other causes, and in exhaustion from inanition. It has been, too, of temporary service in phthisis and in cancer of the stomach. Its use is suggested in the collapse of typhus and in the diarrhœa of children, where exhaustion is threatened.

Mr. Barlow desired to ask a question respecting the case just read. He had understood, that the beneficial effects had been produced by the injection of one ounce of blood. If that were all the blood used, it was, he thought, very surprising, that such an extent of rallying should follow the employment of so small a quantity.

The President remarked, that the author was not present, and therefore could not furnish the desired information. With respect to the smallness of the quantity of blood used, there were many cases alluded to in the table, in which also a small amount only was injected with beneficial results. The strange blood admitted seemed to have the effect of rousing the nervous energy and the heart, showing that it is not the quantity of the fluid, but the stimulus that is required. In other instances very large quantities of blood were transfused.

No other remarks being offered by the Fellows, the President applied to Dr. Robert Lee to furnish the Society with his opinion, and the results of his experience with respect to transfusion.

Dr. Lee had never seen transfusion of blood employed in any case of uterine hæmorrhage, nor could he place much reliance on it in any of the varieties of flooding; he did not believe that in the case before the Society the recovery of the patient could be referred to the introduction of an ounce of blood into the venous system. In accidental uterine hæmorrhage, if the membranes be ruptured early, and, that failing, if delivery be completed speedily by turning, the forceps, or craniotomy, and all the means in our power be employed to secure uterine contraction, comparatively few women will perish. He (Dr. Lee) had seen some recover where the symptoms were of the most alarming character, and recovery appeared absolutely impossible. In such cases, had transfusion been employed, the recovery would have been referred to it, and not to the real cause—the persevering and vigorous use of the ordinary remedies, pressure over the uterus, the external application of cold, and the internal administration of brandy, wine, and ammonia. In the hæmorrhage which takes place after the uterus has been wholly emptied of its contents, the same remedies, if actively employed, are successful in a large proportion of cases. In most of the fatal cases of this description which he (Dr. Lee) had seen, the common practice of introducing the hand into the uterus to excite it to contraction by rubbing the inner surface, had been employed; and he had also seen cases where fatal uterine phlebitis could be referred to the same plan of treatment, which does not succeed in exciting uterine contraction, when the patient is greatly exhausted from previous profuse loss of blood. This practice of rubbing the inner surface of the uterus with the closed fist, is not merely inefficacious in the worst cases of atony of the uterus, but it actually displaces the coagula from the exposed vessels which form one of the principal means employed by nature for the permanent suppression of the hæmorrhage. If proper compression be employed over the hypogastrium, coagula can never form to distend the uterus, and, like a foreign body, prevent its contractions. Hæmorrhage to a dangerous extent can never, he believed, take place where the uterus is contracted in the ordinary degree. The danger of uterine hæmorrhage from placental presentation is much greater than in the accidental variety; but the mortality had been very considerably diminished in his practice since he had observed the fact, that in rigid conditions of the os uteri it is possible to seize the lower extremities of the child with two fingers, and deliver by turning, without introducing the whole hand through the os uteri. It is deeply to be regretted, that an attempt, founded upon a grave anatomical blunder, should have been made to alter the practice established during the last century and a half in unavoidable uterine hæmorrhage. The blood does not proceed from the placenta, as has been asserted, and it is therefore irrational and absurd to recommend tearing it away, or detaching it from the uterus with an iron instrument, and leaving the child within the cavity after having imprudently deprived it of life. He (Dr. Lee) had great faith in the established rules of practice in all the varieties of uterine hæmorrhage.

ON THE OCCASIONAL ORGANIC UNION OF CONTIGUOUS TEETH.

By S. J. A. SALTER, M.B., etc.

(Communicated by THOMAS BELL, Esq., Sec. R.S.)

The object of this paper is to enumerate fresh examples of the so-called "bony" union of contiguous teeth; to explain the true nature of that union, as exhibited by microscopical scrutiny; and to suggest the probable mode of its formation.

1. The fresh instances here recorded are, a united dens sapientiæ and supernumerary tooth of the lower jaw; a cuspidatus and lateral incisor of the lower jaw united; and a specimen exhibiting the lateral and central incisors of the lower jaw in the same condition. These are particularly described.

2. In the next place, the nature of the uniting medium is shown to be dentine and not crusta petrosa, (as stated previously by writers on this subject.) This is demonstrated by microscopical drawings of sections of the teeth.

3. The probable mode by which this abnormity is produced is explained thus:—The pulps of the teeth form in their usual place and usual relation, with this one exception, that the portion of the capsule which should separate them is wanting. The result is, that they come in contact, and when the soft dentinal elements commence calcifying they unite, and the tubes of the two teeth become continuous. There is no enamel between the teeth where the crowns are in contact. The author further remarks, that all the teeth, and in both jaws, have been subjects of this peculiar condition. The paper concludes with a few practical remarks—that, in the majority of cases, the union could not be discovered while the teeth were in the mouth; and that, even where it could be discovered, both teeth must necessarily be removed together should extraction of either be required, as there appears no means of separating them.

Mr. Streeter would ask whether these teeth might not be examples of duplex formation, like the double uterus, etc., and not the result of union. The inscription on the drawing sent round certainly describes the teeth as the bicuspid and the incisor, but

they looked like a duplex formation, and he did not see why that process should not occur in the teeth.

A Visiter thought, that if such were the case, the regular number of the teeth would be imperfect, which did not in this instance appear to be the case.

MEDICAL SOCIETY OF LONDON.

JOHN BISHOP, Esq., F.R.S., President, in the chair.

APPARATUS FOR THE REDUCTION OF DISLOCATIONS.

Fig. 1.—Front view of Screw Extender.

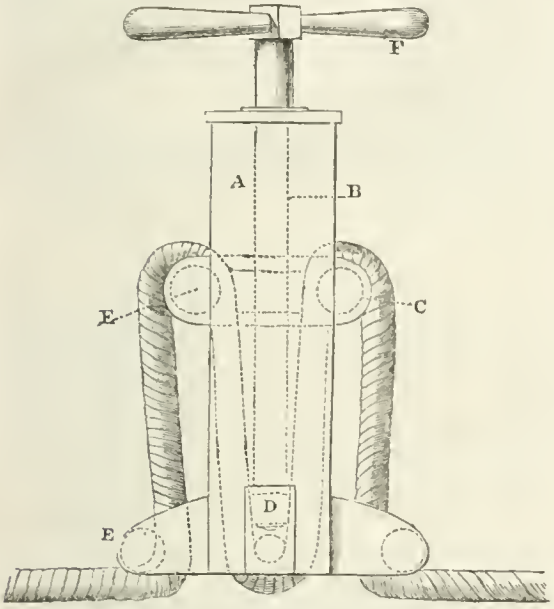
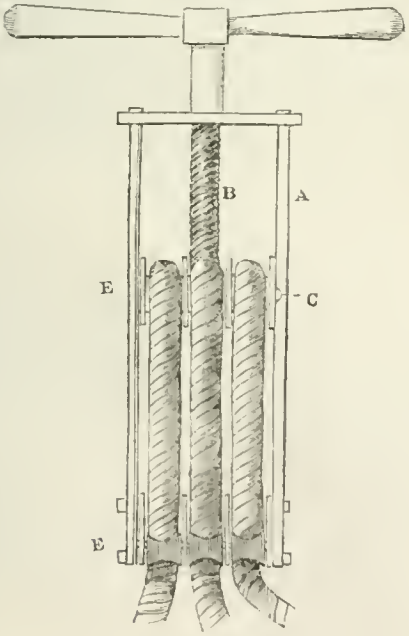
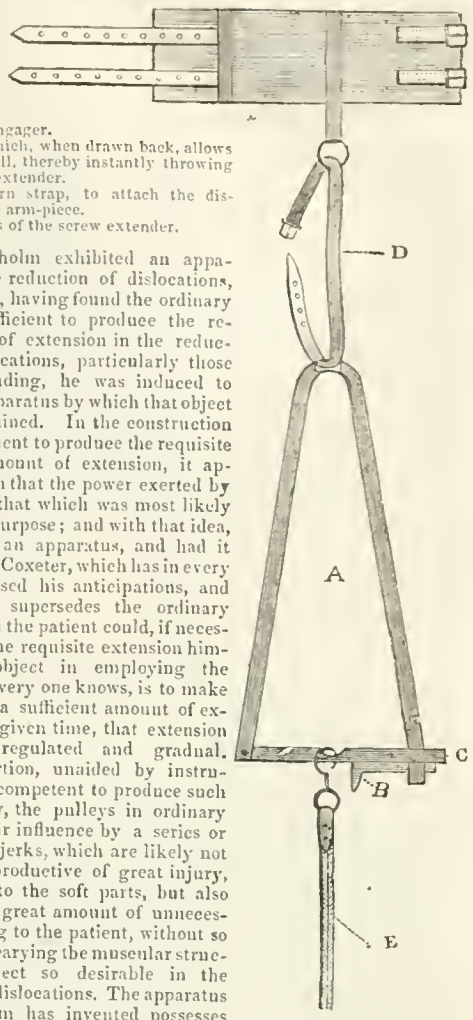


Fig. 2.—Side view of the Same.



A The frame work.
B The screw.
C The movable piece with pulley wheels, over which the ropes play, and which ascends and descends on, and by the action of, the screw.
D The foundation piece, in which the screw works.
E Pulley wheels.
F Handle of the screw.



A The disengager.
B A bolt which, when drawn back, allows the bar C to fall, thereby instantly throwing off the screw extender.
D A leathern strap, to attach the disengager to the arm-piece.
E The ropes of the screw extender.

Dr. Broxholm exhibited an apparatus for the reduction of dislocations, and said that, having found the ordinary pulleys insufficient to produce the required kind of extension in the reduction of dislocations, particularly those of long standing, he was induced to devise an apparatus by which that object might be attained. In the construction of an instrument to produce the requisite kind and amount of extension, it appeared to him that the power exerted by a screw was that which was most likely to effect the purpose; and with that idea, he invented an apparatus, and had it made by Mr. Coxeter, which has in every respect realised his anticipations, and which quite supersedes the ordinary pulleys; even the patient could, if necessary, make the requisite extension himself. The object in employing the pulleys, as every one knows, is to make and keep up a sufficient amount of extension for a given time, that extension being well-regulated and gradual. Manual exertion, unaided by instruments, is incompetent to produce such effects. Now, the pulleys in ordinary use exert their influence by a series or succession of jerks, which are likely not only to be productive of great injury, particularly to the soft parts, but also to occasion a great amount of unnecessary suffering to the patient, without so effectually wearying the muscular structure—an object so desirable in the reduction of dislocations. The apparatus Dr. Broxholm has invented possesses great power of making extension, which can be well regulated, and made very gradually, and continued manual exertion is superseded by the ordinary power of the instrument itself. Very little force is required to produce an extraordinary degree of extension, and which, as before stated, when once made, can be kept up without the slightest manual interference. As will be seen from the accompanying illustrations, the length of extension will be four times that of the ascension which the screw, when turned to the right, causes the movable piece to make; consequently a very small apparatus is sufficient for the fulfilment of the intention; in fact, the apparatus possesses the power of the ordinary pulleys in an increased degree, without their objections, as well as the nicely-regulated action of the screw of the tourniquet. The next object to be effected, when the requisite degree of extension has been produced, and the articulating extremity thereby brought within due limits of the situation from which it has been displaced, is to suddenly disengage the extending apparatus, when the *tactus eruditus* will complete the reduction. Dr. Broxholm has added an appendage to the extending apparatus to carry out the above intentions, which will be seen from the illustration, with a description of its action. The apparatus was used successfully a week ago, when the ordinary pulleys had failed, in the reduction of a neglected dislocation of the humerus forwards, of between ten and eleven weeks' duration.

PARIS ACADEMY OF SCIENCES.

ON THE RELATIVE PROPORTIONS OF NUTRIMENT IN VARIOUS KINDS OF ANIMAL FOOD.

By M. MARCHAL.

M. MARCHAL communicated the results of his experiments, undertaken to determine the relative amount of nutriment in beef,

mutton, pork, veal, and fowl. He took twenty grammes of the muscular fibre of each of these animals, carefully selecting flesh free from cellular tissue and all fatty matter, except that naturally interposed between the muscular fibres, and evaporated them to dryness in a water-bath. The following table gives the results obtained:—

	First Experiment.		Second Experiment.	
	Solid matter.	Water.	Solid matter.	Water.
Pork	294·50	705·50	302·50	697·00
Beef	277·00	723·00	275 50	725·00
Mutton	265·50	734·50	263·50	736·50
Fowl	263·50	736·50	263·00	737·00
Veal	260·00	740 00	255 50	744·50

"It may be imagined," says M. Marchal, "from the above figures, that, as regards the nutritive powers of the above-named articles of food, they should be estimated in the order in which they stand. This conclusion, however, would not be correct, as those kinds of flesh in appearance the leanest, contain fatty substances which interfere with an estimation of the nutritive power properly so called. It is the muscular flesh that expresses real nutritive power, the fatty substances acting only as food for the respiratory organs, and not in the repair of the body. In order, therefore, correctly to determine the amount of nutriment in various kinds of food, it is necessary to eliminate these fatty substances from their solid residuum. This was done in the second experiment by treating the residuum, obtained in each case, with ether, until completely exhausted. The following were the results:—

	Matter soluble in ether.	Matter insoluble in ether.
Beef	25·437	249·563
Fowl	14·070	248·930
Pork	59·743	242·757
Mutton	29·643	233·857
Veal	28·743	226·757

Thus it will be seen, that in the order of their nutritive power the flesh of these animals must stand in the following order:—Beef, fowl, pork, mutton, and veal.

M. Magendie made some critical observations on the foregoing communication, which was sent to a Committee to be reported on.

At the annual public sitting held on the 22nd of March, the following were among the prizes awarded:—

Experimental Physiology Prize to M. Bernard, for his treatise on a new function of the liver in man and animals.

Medical and Surgical Prize of 2500 francs to M. J. Guerin, for his generalization of sub-cutaneous tenotomy. A sum of 2000 francs was awarded to M. Huguier, for his researches on the diseases of the female organs of generation. 2000 francs to MM. Briquet and Mignot, for their practical and analytical treatise on cholera. 2000 francs to M. Duchenne, of Boulogne, for his electro-physiological researches applied to pathology and thera-peutics. 2000 francs to M. Prosper Lucas, for his physiological and practical treatise on hereditary tendencies, both in a state of health and disease. 2000 francs to M. Tabarie, for having been the first to employ compressed air in the treatment of affections of the organs of respiration and other diseases. 2000 francs to M. Pravaz, for having elucidated, in the clearest manner, the influence of compressed air on the organs of respiration, on hematose, and the circulation, etc. 2000 francs to M. Gluge, for his treatise on pathological histology, and the application of the microscope to a detection of the alteration of the animal tissues. 1500 francs to M. Gosselin, for his researches on the obliterations of the spermatic ducts. 2000 francs to M. Garriel, for his applications of vulcanised Indian-rubber to medical and surgical purposes. 1500 francs to M. Vidal, of Cassis, for his invention of *serres-fines*, a kind of small clasp, by means of which, the edges of a wound, after operations, etc., are kept in contact better than by the use of bandages, plasters, sutnre instruments, etc. 1000 francs to M. Serre, of Uzes, for his researches on the luminous phenomena produced in the interior of the eye, by the pressure of that organ in particular directions and by various means. 1000 francs to M. Boinet, for his paper on the treatment of abscess by congestion, with iodine injections.

A prize of 2000 francs was awarded to M. Sucquet for his improved method of preserving bodies by the injection of an antiseptic liquid through the carotid arteries. This preservative liquid is prepared as follows:—A current of sulphurous acid gas is passed through a solution of carbonate of soda of the strength of from 20° to 22° Baumé, (sp. gr. 1·160 to 1·180,) until the whole of the carbonic acid is displaced, and the solution contains a slight excess of sulphurous acid. The fluid should then have a specific gravity of 1·200. It is next placed in a vessel containing clippings of zinc, and allowed to remain in contact with the metal until it has become sensibly neutral, the blade of a knife dipped into it not turning brown on exposure to the air. From four to six litres of this preparation are employed to inject a subject. After twenty-four hours, dissection may be proceeded with, and continued, without any inconvenience, for twenty, thirty, or even forty days. One of the great advantages arising from the employment of the sulphite of soda consists in the beneficial influence it exerts in cases of the accidents to which the operator is subject in the dissecting-room.

During the five years in which this preservative liquid has been employed, no fatal case has occurred.

A prize of 2000f. to M. Masson, for his process of preserving culinary vegetables by means of desiccation. These processes consist in first drying the vegetables, by the application of a moderate heat, in a stove, until a certain portion of the water has been driven off, and then submitting the dried substances to great pressure by means of an hydraulic press. The vegetables, thus prepared, when immersed in water, regain the greater part of the moisture contained by them previous to their desiccation, and, when cooked, are equal to fresh vegetables.

The summer course of cliniques of the Faculty of Medicine of Paris commenced with the beginning of April. M. Rostan and M. Roux at the Hotel Dieu, M. Piorry and M. Velpeau at la Charité, M. Nelaton at the Hôpital Clinique de la Faculté, and M. Langier at la Pitié.

MEDICAL NEWS.

Royal College of Physicians.—The President and Fellows of the Royal College of Physicians will receive distinguished literary and scientific persons at a *soirée*, on Wednesday evening, June 9.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 21st inst.:—

Carter, Vandyke Henry, Scarborough, Yorkshire.
Crosby, Thomas Boor, Gosberton, Lincolnshire.
Cunliffe, Robert Aulezark, Garstang, Lancashire.
Cusack, Samuel Athanasius, Dublin.
Davis, Maurice, Thame, Oxfordshire.
Foley, Samuel, Army.
Frost, Thomas, Hucknall, Forkard, Nottinghamshire.
Hurley, Michael, Dublin.
Lewis, Robert Benson, Trinity-square, Southwark.
Musson, William Edward, Birkholme, Lincolnshire.
Riddell, Andrew Nesbitt E., Aurungabad, East Indies.
Shout, Augustus Charles, Hampstead.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 20, 1852:—

Barnett, Barnabas, Shrewsbury.
Croudace, Thomas, Chester-le-street.
Gill, William George, London.
Richardson, Alfred, London.
Sankey, George, Ashford.
Sykes, John, London.
Wood, Alfred Stephen, London.

University of Oxford.—In a congregation, held on the 19th inst., the degree of M.D. was conferred on Barrington Chevalier, of Brasenose. The examination for the medical degree at Oxford takes place on the 15th of June. Candidates must transmit to Dr. Ogle, the Regius Professor of Medicine, the usual certificates of their having complied with the requisitions of the statute, on or before Monday, the 31st inst.

London University.—In our list of gentlemen admitted to the degree of M.D., in this University, the name of James Jones was accidentally omitted.

University of Dublin.—Dr. Samuel Gibson, who recently passed the examination for the diploma in Surgery instituted by the Board of Trinity College, has received intimation, from the Chief of the Medical Department of the Army, Dr. Andrew Smith, to hold himself in readiness to proceed to Chatham, preparatory to his entrance into the service as assistant-surgeon. This practical and spontaneous recognition of the value of the University diploma cannot fail to satisfy students and their friends of the nature of the surgical qualification of Trinity College.

Medical Appointments and Vacancies.—Mr. Sheppard has been elected house-surgeon to the Worcester Infirmary. Mr. Felix Clarke was also a candidate. The vacancy was caused by

the decease of Mr. Herbert Cole, to whose memory it is proposed to raise by subscription a monument in the cathedral. Both candidates were spoken of in the highest terms by the Governors. Mr. Sheppard obtained the election by a majority of 120. His father had performed the duties of surgeon to the infirmary for thirty-three years.

Military Appointments.—57th Foot: Acting Assistant-surgeon T. Clark Brady, to be assistant-surgeon, vice Jackson, promoted on the Staff. Hospital Staff: Assistant-surgeon James Jackson, from the 57th Foot, to be staff-surgeon of the second class.

Obituary.—On the 21st inst., in Barnsbury-road, William Webber, M.D., surgeon R.N., aged 34. On the 21st instant, at Star-hill, Rochester, John Lewis, Esq., surgeon, H.P., and in charge of medical stores, Fort Pitt, Chatham, aged 78.

Guy's Hospital.—Mr. Masterman, M.P. for the City of London, having placed at the disposal of the authorities of Guy's Hospital an assistant-surgeoncy in the Hon. East India Company's Service, the Examining Medical Council have conferred it on Mr. Wm. Burns Beatson, a student of the Hospital. This is the 2nd appointment within three years that Mr. Masterman has generously given to the authorities, to be awarded to the most distinguished among the pupils of Guy's Hospital, of which he is a Governor. It is an excellent plan for the disposal of such patronage, and cannot fail to be highly serviceable to the Company and to the Profession.

St. George's Hospital.—The appointment of assistant-surgeon in the service of the East India Company, given to the Medical School of St. George's Hospital by Sir Benjamin Brodie, has been accorded to Mr. George Naylor, one of the pupils. Mr. Pollock has placed a similar appointment at the disposal of this hospital.

The foundation-stone of the New King's College Hospital will be laid on the 17th of June next, at 1 p.m., by the Earl of Ellesmere. 14,000*l.* being still required to complete the estimated cost of the site, and of the contemplated buildings, the munificent Rev. Dr. Warneford, already so largely a benefactor to King's College, and to that known as Queen's College, Birmingham, has offered the additional sum of 500*l.*, to be paid as soon as nine other sums of an equal amount have been subscribed. Two of these have been already secured.

Medical Benevolent Fund.—As stated briefly in our last, the First Dinner of this Charity took place on Thursday, the 20th inst., at the London Tavern. The Earl of Carlisle, who presided, in proposing the toast of the evening, said: It is a toast relating especially to the business of this assembly—"Prosperity to the Medical Benevolent Fund." In introducing it, I labour under a difficulty by no means uncommon; I feel that, both from the obvious character of the undertaking, and also from the constitution of the present assembly, all that I could advance must be more vividly present to the minds of others than to my own, and be anticipated by them. Nevertheless, though for some reason or other I have often been called on to make after-dinner speeches for charitable institutions, I do feel more than a usual desire not to be wanting to the present occasion. This may arise from my feelings of regard to the gentleman who enlisted me—Mr. Toynbee, and partly from the intrinsic merits of the undertaking; and partly, also, from the fact of this being the first celebration of the founding of the Institution. (The noble Earl then gave a brief outline of the history of the Fund, expressing a hope that it had now taken permanent root, which could hardly be questioned by any who saw the details of the cases which had been relieved. He then read from the Report the particulars of several cases in which the Institution had afforded relief, and proceeded:) The deep tragedies of such cases must speak more forcibly to your hearts than any rhetoric which I could bring to bear on them. I know, gentlemen, that it has been thought, that our efforts ought to be directed to prevention rather than to palliation, and that prudence and caution ought the rather to be cultivated in respect to these evils and calamities. Now, I do not mean that this principle should be left wholly out of view; but I am convinced that it cannot be rigidly applied in a world like ours—steeped in so much misery, and misery brought about by events over which we can exercise no control. Take, for instance, the circumstances of your own Profession. The rolls of that Profession include a large list of young practitioners fresh in the practice of their calling, and with far more of ardour and devotedness than of money in their purses. We know well, also, that there is scarcely a street or alley which is not rife with pestilence and corruption, and scarcely a gale which is not tainted with disease and death for some. Under such circumstances, the voice of duty speaks positively to the medical practitioner as to the soldier in the very shock of the battle. The voice of duty says:—"You, too, must go into the front ranks of danger—you must descend into the harvest of death—you must inhale the breath of corruption—you must encounter all that is most loathsome and revolting in nature." I feel sure, that none of you shrink any more from duty than do the bravest of our sailors or the boldest of our soldiers. But the soldier has his Chelsea—the seaman has his Greenwich, and the yearly budget is laden with the dead weight of pensions. But for you, whose Profession it is to save life—whose privilege it is to repair and not to inflict the ravages of violence and crime—for you, the national gratitude provides no asylum, secures no relief, awards no compensation. Well, then, what the gratitude of the nation has prevented, and what the national gratitude does not offer, it devolves on you and on us to do; and those on whom this duty devolves may be separated into two classes—medical men, and others. With respect to the former, I would appeal to those of long standing and of considerable reputation, to do it from motives of sympathy and generosity; and I would call on those who may not as yet have been altogether successful in their calling, but who are still struggling, to do it, so that, in their hour of need, they may have furnished for themselves the best of all pleas for assistance; but on one and all I call on to do it, because you belong to a Profession which has always appeared to me to have something godlike in it. It was deemed so in the Homeric era, and is as strikingly evidenced when we read of the divine Polybius; and surely it is not less so now, when, if any, it proved itself to be the Profession of all others sanctioned by the Divine Author of our faith. And then, if there be something godlike in it, I shall not call on you in vain to carry a savour of that divinity into all your actions. To those who do not belong to the Profession, I think we should all of us lay it to heart how little we know when the fatal stroke—when the death-blow will come upon us; and if we would do justice, and afford due encouragement to the skill and ability of those who can then be the only instruments in suspending the uplifted blow and prolonging the precious hour in the balance—hours for which we should be ready to lavish our treasures and life itself,—if we would endue them with the proper motives to be our saviours, then it belongs to us to do while we have the opportunity—to do all we can in support of such a noble Institution. I beg to propose the toast, coupling with it the name of Mr. Newnham.—The toast having been drunk with honours, and Mr. Newnham having acknowledged the honour in a speech which was very indistinctly heard, Mr. Toynbee, Treasurer to the Dinner-fund, read the first list of donations, etc., in doing which he paid a handsome tribute to the self-denying and unwearied exertions of Mr. Newnham—to whom they owed a great debt of gratitude; and also to Mr. Churchill, who, with his accustomed liberality, had placed at the command of the Committee one of his rooms in London, besides being one of the most active members of that Committee. Dr. Burrows was also mentioned in grateful terms, for his exertions in collecting for the funds—to whom a first list, amounting to 157*l.*, was due. The President next proposed "The Royal College of Physicians," coupling with it the name of Dr. Seymour; and in succession "The Royal College of Surgeons," with the name of Mr. South. The other toasts were, "The Provincial, Medical, and Surgical Association, in which the Fund originated, and Sir C. Hastings;" "The Worshipful Society of Apothecaries, and Mr. Eyles;" "The Society for the Relief of Widows and Orphans of Medical Men, and Dr. Burrows;" "The British Medical Fund, and Dr. Forbes;" "The Medical Benevolent College, and Mr. Propert." Dr. Conolly proposed "The Provincial Benevolent Fund;" and Sir James Clark having, in an eloquent and feeling speech, proposed the health of the noble Chairman, Lord Carlisle replied and retired; previous, however, to his doing so, Mr. Toynbee read the second list of subscriptions, and announced that the total amount subscribed was more than 500*l.*

Medical Society of London.—The reading of Dr. Cormack's paper, which was announced in our last Number for this evening's meeting, (the closing one of the session,) is prevented by the unavoidable absence of that gentleman from town.

The Convalescent Fund of St. George's Hospital.—The box at the corner of St. George's Hospital, for the deposit of gifts in aid of the Convalescent Fund—the touching inscription of which is the object of so much attention—has just received a donation of 20*l.* from Lord De Blacquire, the owner of the yacht America, now cruising in the Mediterranean. His Lordship, in a letter to Dr. Wilson, states, that "it is the product of a Charity-tax of one pound each," which he has inflicted upon friends who have sailed with him; and he trusts, that the publicity given to the fact will induce other owners of yachts to do likewise.

The Metropolitan Interment Bill.—Lord John Manners moved, on Friday night last, for leave to bring in a Bill to amend

the law concerning the burial of the dead in the Metropolis. The Bill has two objects; one, to close the burial-grounds in the Metropolis; the other, to empower parishes to create cemeteries and burial-grounds outside the Metropolis, to receive the bodies for which the intramural burying-grounds cannot find room. This Bill is in direct opposition to that carried by the Board of Health, but which, through the omission of one clause relative to rating, was found inoperative.

The London Necropolis and National Mausoleum Bill was read a third time and passed in the House of Commons, on Friday night. (This is the Woking scheme.)

M. Chomel.—Politics affect even the peaceable science of Medicine. M. Chomel, the celebrated Parisian physician, having refused to take the oath to the President, required by the *quasi*-Constitution, has vacated his Professorship at the College of Medicine.

A medical man in Breslan has been fined 40 thalers for having neglected to attend to a patient who sent for him. (!)

Progress of Epidemics. — The small-pox is spreading in Jamaica. In the parish of St. Anne, where it had only been prevalent two or three weeks, there were upwards of 4000 cases. The greatest destitution prevailed, and, in many instances, poor persons perished for the want of assistance and of medical care. In Kingston there are several cases. The cholera, which was lately reported to be exceedingly fatal in Bokhara, is now stated to have broken out in some places in Upper Silesia, a part of the Prussian kingdom, where great misery prevails. If this be really the case, and it should extend, as it will in all probability, the mortality will be dreadful, for the dearth and misery in many parts of Germany have, of late, been on the most fearful scale, so that the bodies of dead dogs, in a semi-putrescent state, have been devoured by the starving inhabitants.

Patent Agency.—In consequence of the death of the late Mr. R. W. Urling, the patent agency business, lately carried on at 19, Rue de Brabant, Brussels, will be continued on the same footing as before, in the name of Urling and Co., the acting partner being Mr. William Henry Kirkpatrick. We beg to recommend the firm in all patents bearing on the Medical Profession.

DEATHS *in the Metropolis for the week ending Saturday, May* 22, 1852.

Causes of Death.	May 22. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	451	314	174	943	8891
Specified Causes	450	314	174	938	8853
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	175	48	10	228	1888
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	16	18	39	459
3. Tubercular Diseases	66	116	5	189	1843
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	51	40	29	120	1156
5. Diseases of the Heart and Blood-vessels	4	23	6	33	308
6. Diseases of the Lungs and of the other Organs of Respiration ...	68	24	39	131	1145
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	18	27	14	59	566
8. Diseases of the Kidneys, &c. ...	...	5	3	8	82
9. Childbirth, Diseases of the Uterus	...	7	...	7	92
10. Rheumatism, Diseases of the Bones, Joints, &c.	...	...	...	...	68
11. Diseases of the Skin, Cellular Tissue, &c.	1	...	...	1	20
12. Malformations	2	...	...	2	12
13. Premature Birth and Debility ...	27	2	...	29	223
14. Atrophy	22	...	...	22	162
15. Age	...	...	44	44	463
16. Sudden	2	2	1	5	95
17. Violence, Privation, Cold, and Intemperance	9	7	5	21	271
Causes not Specified	1	...	...	5	38

TO CORRESPONDENTS.

We have to intimate that, in future, all Communications for this Journal must be authenticated; gentlemen, therefore, who address us must favour us with their names,—certainly not for publication, but that we may be satisfied of their good faith. Henceforth, then, it is to be understood, that, when a letter is unnoticed, it is because the writer's card did not accompany it.

Gentlemen desiring personally to communicate with the Editor, on the business of the Journal, will find him during the Summer Months, on Tuesdays, Wednesdays, and Thursdays, between the hours of 12 and 2, at the Office, 46, Princes-street, Soho.

It is again requested that communications SHALL NOT BE OTHERWISE addressed than

To the Editor,
"Medical Times and Gazette" Office,
46, Princes-street, Soho,
London.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have read with much interest, in your Number of May 8, p. 473, some observations made by Professor Bennett on the exhibition of quinine in typhus and typhoid fevers. Dr. Bennett stated, that in none of the cases treated by him did the quinine shorten the disease, or in any way favourably influence its progress; but he says that the experience of other physicians had been more favourable. Dr. Graves, of Dublin, for example, had written to Dr. Dundas to that effect, &c. &c. My present object is to state, that there must be some mistake with regard to my experience, as I have never had an opportunity of testing the efficacy of the method of treatment recommended by Dr. Dundas.

Dublin. I am, &c. Robt. J. Graves.

We are unwillingly obliged to decline the communication of "M.D., and an Admirer of Religious Freedom."

Allopath will be published as soon as possible.

E. A.—Mr. Wiblin, of Southampton, has published (Renshaw) a work on the Parisian schools, to which we refer our correspondent.

No such "Students' Magazine" as our correspondent suggests, could exist more than a session.

A Subscriber.—We believe not. The subject is very nasty.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have lately been consulted by a gentleman for a varicose state of the veins of the penis, especially of those on the dorsum. When he first perceived it, two or three years ago, he derived temporary benefit from the use of some lotion. As such an affection is not alluded to in any work on surgery to which I have access, I shall be obliged if you or one of your Correspondents will suggest a remedy to An Inquirer.

[To the Editor of the Medical Times and Gazette.]

Sir,—As Mr. Sibley is not satisfied with Mr. Ward's experiments on the clavicle, and as he thinks those experiments do not explain why the bone was dislocated and not fractured, let us again turn to the case as reported by him. I have not a copy of your Journal with me to refer to, but I think it was stated that the injury was caused by a horse having planted its hoof on the girl's clavicle. Here, then, without calling in the aid of experiments, is, I think, sufficient cause to explain why the bone was dislocated and not fractured. A horse's hoof being nearly as long in the transverse direction as the clavicle, it would press on nearly the whole length of the bone. Again, the clavicle being a bone which has little to support it behind, and the ligaments which support the sternal end being less strong than those which support the acromial end of the clavicle, I conclude the bone must either have been dislocated or crushed. I leave it to Mr. Sibley to decide whether the bone were more likely to have been crushed than for a ligament or two to give way. I am, &c.,

A St. George's Student.

P.S. I must also beg to inform Mr. Sibley that the experiments of Mr. Ward do not demonstrate the strength of the clavicle (as stated by him), but the elasticity of that bone. I think he will come to the same conclusion, if he carefully reads Mr. Ward's experiments.

We dare say that Dr. Foote's proposed work on Lunatic Asylums will be very useful.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your Notice to Correspondents, I shall be obliged for your opinion to the following:—

I attended a lady with peritonitis, and paid every attention. She recovered completely. Ten days after, from some imprudence in diet, had an attack of pain in the abdomen, arising from spasms, through irritation. I was sent for, and prescribed. Because she was not immediately relieved, sent for another medical man, without first mentioning it to me. I sent immediately my account, and declined attending her any longer after such treatment. Did I act professionally or not in the matter? I am, &c.

A Constant Subscriber.

[Perfectly professionally, as far as we can judge from the facts before us.]

COMMUNICATIONS have been received from—

Dr. Smith, of Cheltenham; Mr. Newnham, of Farnham; Dr. Maddox, of the British Seaman's Hospital, Constantinople; Dr. James Jones, of Judd-street; A Constant Subscriber (unauthenticated); Mr. Burford Norman, of Duchess-street, Portland-place; J. T., Edinburgh (unauthenticated); M. D., and An Admirer of Religious Freedom; E. A.; Messrs. Palm and Enk, of Erlangen; Mr. Hughes, of College-street; Dr. Barlow, of the Westminster Hospital; Mr. Williams, of Jermyn-street; A Subscriber; Mr. Middlemore, of Birmingham; A St. George's Student; Mr. Wilde, of Dublin; Dr. Graves, of Dublin; M. D. Edin; Dr. Todd, of King's College and Spring-gardens; Mr. Milton, of Jewin-street; Dr. Flynn, of Clonmel; Inquisitor (unauthenticated); Mr. Walton, of St. Mary's Hospital and Grosvenor-street; Well Wisher (unauthenticated); Dr. Hunt, of Brook-street; Dr. Budd, of Bristol; Mr. Lacy, of Poole; Mr. Ludlow, of Paternoster-row; Mr. Churchill, of Colchester; A Constant Subscriber (unauthenticated; M. R. C. S.

ORIGINAL LECTURES.

CLINICAL LECTURE

ON AN

ERYSIPELATOUS AFFECTION OF THE THROAT,

DESTROYING OR GREATLY IMPAIRING THE POWER OF DEGLUTITION.

DELIVERED AT

King's College Hospital.(a)

By ROBERT B. TODD, M.D., F.R.S.,
Physician to the Hospital.

Gentlemen,—I shall beg your attention to-day to the particulars of an extremely interesting case, an affection of the throat, which interferes very much with the act of deglutition. The affection is a rare one, and, so far as I know, has escaped the notice of systematic writers. The case which I am about to bring before you is, therefore, the more deserving of your attention, and especially as it is a a good example of a disease of which I have myself seen only four other cases. The disease is of a very fatal tendency, if not at once treated with great decision. On this account it is of the last importance that you should immediately recognise it, as delay in the adoption of suitable treatment may be fatal to the patient. The cases are, if I may so speak, of the kill or cure class; the symptoms last but a short time, and the disease runs its course, whether for life or death, in a brief period.

The patient is a man named George King, in Sutherland Ward, aged 64; he is tall, and of spare build, and he looks much older than the age he gives, and appears as if he had been suffering for some time from illness. This condition, he tells us, results from a severe attack of rheumatic fever, under which he suffered about a year and a half ago, which was accompanied with cardiac affection.

Since that attack, he has been more or less an invalid, from a succession of catarrhal affections up to Friday the 26th of April, 1851, on which day, while he was crossing St. James's-park, he was suddenly seized with a sensation as if something had forcibly closed his jaws, and he found, to his alarm, that he could not open his mouth with the most violent effort. The affection at the same time seemed to attack the throat, and completely to prevent his swallowing. When he arrived at Pimlico he could not speak distinctly; he could not eat any dinner, and was unable to swallow some gin and water which he attempted to take. He could get it into his mouth, and it even reached the pharynx, but would go no further; it seemed, to use his own expression, "to stick in his throat," and was soon returned. He made frequent and ineffectual attempts to swallow, but, from this time till the following Tuesday, he remained without taking a particle of nourishment.

When he was admitted into the hospital, attempts were made to examine his throat, but, in consequence of the state of trismus which prevailed, the teeth could not be separated sufficiently far apart to admit of any examination being made. I will read you the following extract from notes made at the time of his admission, by Dr. Salter, the house-physician:—"On attempting to look into his mouth, I found I could not separate his jaws more than about one-eighth of an inch,—just a chink. I gave him some water, which he attempted to swallow. He performed the buccal and lingual, and, to a certain extent, the pharyngeal part of deglutition, but then, with a spasmodic effort to get it further, he choked, his eyes looked as if they would dart from his head, and up it came. Repeated attempts merely led to repeated failures. I could neither look into his throat, nor insert my finger to feel it."

When I saw him, on the afternoon of the same day, I found just the same state of things,—deglutition quite impossible, the attempt to swallow followed by the forcible ejection of the food through the mouth, and in some degree through the nostrils, by a spasmodic expiratory effort.

In considering what might be the affection calculated to give rise to these symptoms, I first thought of stricture of the œsophagus; but, upon inquiry into the history of the case, it seemed very unlikely that the difficulty of deglutition could arise from this cause. The affection came on suddenly, which is not the case in the ordinary stricture of the œsophagus. Stricture of the œsophagus generally results from cicatrization of ulcers and contraction of the tissues adjacent, and such strictures are most apt to occur in the lower part of the tube not far from the cardiac orifice. Did such a stricture exist, the dysphagia would have been of a different kind. Here matters were suddenly and forcibly rejected, while, in the former condition, the food is swallowed to a certain point, and seems to encounter an obstacle at a certain situation, to which the patient points with his finger; then it is either stopped completely, and afterwards ejected, but not with the force and rapidity which we observed in this case, or, by a considerable effort, it is made to overcome the obstacle. A spasmodic state of the œsophagus might create a dysphagia like that noticed in this case; but the symptoms would scarcely have come on so rapidly, nor would the danger of choking have been so imminent, as in our patient. It seems to me, that the seat of obstruction or difficulty was not so low as the œsophagus, but rather in the pharynx, and that the food encountered it immediately on passing from the mouth.

Difficulty of deglutition sometimes results from an affection of the medulla oblongata, but here it is produced by paralysis of the nerves which arise from the medulla and supply the pharynx, such as the vagus, or glosso-pharyngeal. In such cases, the dysphagia does not come on suddenly, and would not be accompanied by the acute symptoms present in this case. Aneurisms, again, frequently give rise to dysphagia. Difficulty of deglutition is often a most important diagnostic mark of thoracic aneurism; but this, of course, comes on gradually, as the dimensions of the aneurismal tumour increase.

Another cause to which we might refer these symptoms is, inflammation of the epiglottis, which is capable of producing great difficulty of deglutition; and, if we bear in mind the position of the epiglottis, we shall not be at a loss to conceive how this takes place. If the epiglottis be enlarged, it lies as a tumour between the rima glottidis and base of the tongue, and would not only form some degree of obstruction to the passage of the food down the pharynx, but it would prevent that perfect apposition of the root of the tongue to the rima glottidis which is necessary for the perfect closure of that chink. When the epiglottis is diseased, the difficulty of swallowing arises from the tendency of the food to pass into the larynx, the effect of which is, a violent spasmodic action of all the muscles of the part, and the food is forcibly projected upwards into the posterior nares. Thus this peculiar mode of regurgitation of the food becomes a most valuable point in the diagnosis of a diseased state of the epiglottis. For you will always find, that, where difficulty of deglutition arises from an inflamed or ulcerated state of the epiglottis, the food is thrown upwards into the nose, and is frequently forced out at the nostrils with considerable violence. In the present case, no such condition existed; the food was chiefly rejected through the mouth; only a small portion of it could have passed through the nostrils; but, to any one witnessing the man's attempt at deglutition, it was plain that the dysphagia was very different from that which characterises disease of the epiglottis. Moreover, in disease of the epiglottis, there is more or less of affection of the voice. In our patient that function was not impaired. Hence I was led to exclude epiglottidian disease from my diagnosis.

Again, it might have been a case of common cynanche tonsillaris. If we could have opened his mouth, this point might have been decided at once; but the complication of trismus hindered our efforts at diagnosis very much. However, I decided against cynanche tonsillaris upon the suddenness and force of the rejection of the food. In cynanche, the deglutition is extremely difficult and painful, and made with great effort and suffering; but it is not impossible, nor is the rejection of the food made in that violent, sudden way which we observed in this case, nor with the signs of choking.

If, then, there was no cynanche, no stricture, no laryngeal or epiglottidian disease, no aneurismal or cerebral affection, what could have caused this remarkable dysphagia?

When I had examined the patient, the existence of certain cases was brought forcibly before my mind, and I felt certain that the peculiar symptoms in the present instance resembled those which I had observed on some previous occasions with great interest. Four of such cases I have now seen. The

(a) Lecture XXXI., May, 1851.

first occurred to me many years ago in private practice. I was called to see a lady who had for some days been suffering from influenza. The principal affection, however, was great difficulty of deglutition. When she took any food, it evidently reached the isthmus faucium, but there it seemed to excite choking, in consequence of a portion apparently passing into the larynx, whence it was repelled with considerable force; so urgent was this difficulty of swallowing, that it was impossible to give her food, for fear of producing suffocation. When I looked into her throat, I saw that there was no mechanical impediment to the passage of the food into the pharynx; and all that I could observe was slight redness of the velum, and the mucous membrane of the pharynx was of a dusky hue. I found, also, that no amount of stimulation of the mucous membrane of the velum would excite contraction of the palatine or pharyngeal muscles. Believing that the phenomena depended upon an inflamed state of the mucous membrane of the throat, and not having yet learned that the proper antiphlogistic in such cases was support and nourishment, I was content to trust to leeches and blisters to the throat. But my patient became more exhausted, and rapidly sank.

The second case occurred in the person of a middle-aged woman, the wife of a respectable tradesman in Westminster. I had no difficulty in immediately recognising the similarity to the former case. The symptoms were just the same. If fluids were given they ran down into the larynx, and were expelled with cough; and any mechanical stimulus failed to excite contraction of the velum. There was dusky redness of the velum and pillars of the palate. Profiting by former experience, I determined to exclude all depressing treatment in this case. I ordered injections of strong beef tea with ten grains of quinine to be given every four hours, and I freely applied the solid nitrate of silver to the fauces. The injections were given regularly, and the next morning I found my patient much better. She could swallow a little, and appeared stronger. I now ordered her to take beef tea and wine cautiously by the mouth, in small quantities at a time, and the quinine was also given by the mouth. In less than forty-eight hours more she had completely recovered.

The third case was that of a gentleman of fortune, whom I attended at one of the hotels in my neighbourhood, in the month of March, when erysipelas was rather prevalent about town. The symptoms under which he laboured were very similar to those which I have just detailed in relating the other cases. There was great difficulty of deglutition, but he had some power of swallowing; there was also the same tendency for fluids to pass into the larynx; the muscles of the palate showed the same want of contractile power. The mucous membrane was of the same dusky red hue. This patient was treated by support and stimulants, and the local application of nitrate of silver. As he was in affluent circumstances I gave him turtle soup and port wine and quinine. He got quite well in two days.

Not long since I was called to see a woman who was suffering from symptoms of the same character. In this, as in the other cases, it was impossible, by any amount of stimulation to excite contraction of the muscles of the soft palate; and if we administered a small quantity of fluid, it ran down into the glottis, causing violent irritation and choking. She had been ill some days, and had been treated by leeching, blisters, and mercury, as in my first case, and was in a state of extreme exhaustion when I saw her. The isthmus was quite open, and there was no impediment to deglutition except the paralytic state of the muscles. This patient died after an illness of two or three days: she died, indeed, while I was in the house.

This was the fourth case, and the patient now under treatment is a fifth. You see that they are all very serious cases, and that I am justified in calling them kill or cure cases, so brief is the period of their duration, whether for weal or woe; and although they are rare cases, you will I am sure appreciate the importance of being prepared for them, so that you may not be at a loss if perchance one should fall to your care. Though these are formidable cases to witness, and run their course very rapidly, terminating in death or recovery within forty-eight hours, they are, I believe, if taken soon enough, perfectly amenable to treatment, and I feel persuaded that the first case which I described would have recovered if she had been treated on a different plan. At the time that it occurred to me, I was not familiar with the symptoms—I was not "up to the disease," if I may so express myself; and I hold the opinion, that such cases would almost always recover if subjected to proper treatment before extreme exhaustion had come on.

Now, believing that our patient up-stairs was suffering in the same way as those other patients whose cases I have related, I put him on the same treatment as that which I followed in the successful cases. Ten grains of quinine, diffused in two or three ounces of strong beef-tea, were administered every four hours, in the form of an enema. I should have also ordered the nitrate of silver to be applied to the throat, but that the state of trismus prevented his mouth from being opened.

On the following day, he was very much better, and his mouth could be opened to the extent of half an inch, and he could swallow a little liquid.

On the 30th, he could open the mouth sufficiently to enable Dr. Salter to examine his throat; and then, although considerable progress had been made towards recovery, the mucous membrane of the upper and back part of the pharynx was found of a purplish, dirty-red colour, indicating, as I thought, the existence of a low erysipelatous inflammation. There was no swelling of the mucous membrane, and no mechanical impediment to the passage of food into the pharynx, but the velum did not contract freely, as it does in health, upon the application of a mechanical stimulant. This condition of the velum depends upon one or both of two causes, viz., upon a benumbed or paralysed condition of the sensitive nerves of the pharynx, through which its muscular action is usually excited by the contact of the food; or upon the extension of the erysipelatous state to the muscles of the part, and a consequent paralysis of them.

The case of our patient King differed remarkably from the others, in being complicated with a state of trismus; which condition, however, I think admits of explanation, on the supposition that the principal source of irritation was the throat. If you call to mind the presence of the extensive nervous plexus lying outside the tonsils and isthmus of the fauces, which is called the pharyngeal plexus, and consider how this is formed, you will not be at a loss to account for this symptom. The pharyngeal plexus, as you know, is made up of fibres from the vagus, glosso-pharyngeal, and sympathetic nerves.

Irritation of theramifications of the two former nerves may be readily propagated to the medulla oblongata, so as to affect the motor portion of the fifth nerve, which is implanted there, and by which a convulsive state of the muscles of mastication may be excited and maintained.

Our patient, as I have said, recovered to a slight extent his power of swallowing the day after his admission into the hospital, and was able to open his mouth slightly. We now discontinued the quinine injections, and gave him wine and nutritious food, and quinine by the mouth. Under this plan, his power of deglutition was completely restored in two days; but there remained a catarrhal state of the mucous membrane of the trachea and large bronchial tubes, for which he was kept some days longer in the hospital.

Now, that this affection of the pharyngeal membrane was of the erysipelatous kind, I think I was justified in affirming, from the following considerations: 1. From the rapid invasion of the attack, and the great constitutional disturbance with which it was accompanied. 2. From the local redness; and 3. From the great prostration with which the attack was rapidly followed, which was sufficient to kill two out of five cases. Our patient King, as well as all the others whose cases I related to you, seemed to succumb at once under the influence of some powerfully depressing poison, just as patients attacked with external erysipelas do. Then, it is well known, that cases of erysipelas of the head and face often commence with sore throat, or that there are a soreness and redness of the fauces simultaneously with the appearance of the first patch on the face.

The marked difference in the treatment of the successful and of the fatal cases, likewise favours the opinion, that the affection was erysipelatous in its nature. The two fatal cases were treated by a depletory and depressing plan; the three successful ones by a supporting plan, which consisted in, first, the careful avoidance of everything tending to produce fatigue, or exhaustion, or depression; secondly, in the frequent administration of quinine in large doses, in beef-tea in the shape of enemata, and afterwards, when the power of deglutition returned, the exhibition of bark, ammonia, wine,

etc., according to the circumstances of the case; thirdly, in the local application of the nitrate of silver to the throat.

The erysipelatous character of the affection is further indicated by its extension to the trachea and bronchial tubes, giving rise to the bronchitis under which the patient subsequently suffered, and from which he is now recovering, having been subjected to a similar course of treatment to that at first adopted.

ORIGINAL COMMUNICATIONS.

CASE OF ACUTE RETINITIS, WITH REMARKS.

By ROBERT TAYLOR, M.D.,

Physician to the Central London Ophthalmic Hospital.

Mrs. Callaghan, aged 35, the wife of a cabman, applied at the Central London Ophthalmic Hospital, on the 10th January, 1852.

Two days previously, while walking along the street, she felt a sudden, severe pain in the left eye, as if she had been struck by a sharp-pointed stone; the pain continued and increased; in a few hours the right eye was similarly affected, the sight rapidly failed, and in the course of the same evening she was in a state of almost total blindness, and great agony. She took a couple of purgative pills, which acted freely on the bowels, and bathed the eyes with cold water, which gave slight relief.

She complained of intense, deep-seated pain in both eyeballs, darting to the top and back of the head; constant, but varying in severity; a feeling of tension in the head and eyes as if they were about to burst; excessive tenderness of the eyeballs and of the whole of the front of the head, so that she screamed out at the slightest touch; constant luminous and prismatic-coloured spectra, in the form of large rings; intolerance of light to such a degree that she could not bear to turn her closed eyes to the window, though the day was dull and foggy; constant spasmodic twitching of the muscles of the eye, which added greatly to her suffering, as the slightest motion was attended with pain. In the right eye vision was totally extinct; with the left, she could just discern large objects, as through a dense fog. She had had no rest since the commencement of the attack, and was worn out with pain and want of sleep.

The right eyelid was slightly red and swollen. With her back to the light, she could for an instant expose a very small portion of the left conjunctiva, which was moderately injected, but the iris was invisible, and the right eye could not be opened at all. The excessive tenderness and photophobia prevented any further examination. Her pulse was rapid and weak, and her tongue clean.

I ascertained that she was a woman of dissipated habits, and that she was seldom for more than a week or ten days free from a black eye or a bruise on the head, inflicted by her husband in their drunken quarrels.

℞ Hydrarg. c. cretâ, ext. conii. aa. gr. iiss. Ft. pil., ter in die sumend.

Unguent hydrarg. c. opio, temporibus infricandum; lotio belladonnæ.

She was directed to darken the room, to remain in bed, and to apply cold water so long as it afforded any relief.

12th.—Slight tenderness of the gums, and strong mercurial fetor of the breath. The pain was less severe, and she had slept a little during the night. With the blinds down, and the eyes turned from the window, she could for an instant expose the left pupil. It was about half dilated, and perfectly regular in form. A glimpse was also obtained of the conjunctiva of the right eye, which was more vascular than that of the left. During the first few days, she found relief from cold applications, but now cold increased, while warmth relieved, the pain.

13th.—Mouth sore and sub-maxillary glands swollen; great relief from the pain and photophobia; the luminous rings had also ceased, and were succeeded by frequent flashes of light, especially on moving the eyes; vision improved; pupils moderately dilated and regular; irides, so far as could be made out, free from inflammation.

Capiat pil. i. omni nocte; magnes. sulph. ℥ss. statim.

15th.—Vision so much improved that she could see small objects at the opposite side of the room, but as if through a thick fog, especially before the right eye, which was all along more severely affected than the other. She opened both eyes without difficulty. There was a very faint pink zone around the cornea, so slight that it could scarcely be perceived without a lens; irides of a light hazel colour, and free from the slightest appearance of disease; pupils well dilated, and of a clear black colour.

Contin. pil. omni nocte; capiat pulv. cinchon. et sodæ ter in die.

23rd.—Vision perfectly clear, but the eyes were weak, and could not be used for more than a few minutes at a time on minute objects. Slight tenderness of the right eyeball, and a little chronic inflammation of the lids. The mercury was discontinued on the 18th; her mouth was now well, and her strength improved.

February 4.—Two days previously the recovery was almost perfect, when a premature recurrence to the gin-bottle brought on a slight return of dimness and pain.

Emplastra lyttæ temporibus; contin. pulv. cinchon. et sodæ.

7th.—The symptoms were again subdued, and, with the exception of slight chronic inflammation of the lids, the eyes were perfectly well.

I saw her again about a month afterwards, and found that her vision was perfect in every respect, and her general health completely restored. The inflammation of the lids had been removed by a slightly astringent lotion.

Remarks.—Diseases of the eye, not being of themselves fatal, we have rarely an opportunity of making a *post-mortem* examination where the morbid process has been still in a state of activity at the period of death; we can only trace the effects of previous disease, often with a very imperfect account of the symptoms by which it has been accompanied during life. Hence the pathology of the deep-seated tissues of the eye is, to a considerable extent, conjectural; and we find the greatest discrepancy in the opinions of authors as to the precise pathological value to be attached to the groups of symptoms which are combined in various forms of what is comprehensively termed amaurosis.

The chronic and subacute affections of the retina have been especially elucidated by the labours of Mr. Lawrence, Mr. Tyrell, and Dr. Jacob; but considerable confusion appears still to prevail with regard to acute inflammation. The term "acute retinitis," is applied by several of our best authors, for example, by Dr. Mackenzie and Mr. Tyrrell, to that form of disease in which the whole contents of the globe are simultaneously involved, and to which the term "ophthalmitis interna," originally proposed by Beer, appears to be much more appropriate; that form in which the inflammation is limited exclusively to the retina, and to which alone the term "retinitis" applies, has been by them entirely overlooked, or, what is more probable from the extreme rarity of its occurrence, has not been observed.

The recorded cases of simple acute retinitis are exceedingly few in number; others may probably exist, but I have only succeeded in discovering two in which the conditions of acute inflammation and absence of complication are combined. One of these is recorded by M. Cunier, in the "Annales d'Oculistique," Suppt., Vol. 1.; and the other, which occurred in the practice of Mr. White Cooper, is given in the *Lancet* of 1844. In both of these cases, the symptoms and appearances exactly resembled those of the case above detailed, and seem to afford sufficient warrant for preserving the distinction which has been drawn between the two diseases. These symptoms can be satisfactorily explained only by referring the seat of the disease to the retina, while the clearness and unaltered form of the pupil, and the absence of any discoloration of the iris show that the other tissues could not have been engaged to any appreciable extent.

The researches of Professor Van der Kolk as to the peculiar arrangement of the blood-vessels of the interior of the eye, throw considerable light upon the pathology of these obscure affections, and seem to explain how inflammation, especially of a chronic character, may remain confined to the retina for an indefinite period; whereas, when it attacks the iris or anterior chamber, this tunic is generally, to a greater or less extent, involved.

The retina is supplied by the arteria centralis retinæ, which breaks up into numerous ramifications, forming a fine capillary plexus which terminates in a marginal vessel just within the ora serrata. Here it was formerly supposed that its connexions ceased, and that the retina was thus cut off from any vascular communication with the rest of the eye; but Professor Van der Kolk has succeeded in demonstrating a set of very minute vessels which pass off from the vascular wreath formed in the zonule of Zinn by the terminations of the ciliary arteries, to supply the hyaloid body and the anterior capsule of the lens, and to communicate with the vessels of the retina. This vascular circle, therefore, in the zonule of Zinn, forms a bond of union between the choroid, iris, capsule of the lens, retina, and hyaloid body; it is in the very focus of inflammation when this attacks the anterior parts of the eye; so that the various communicating vessels necessarily participate in the increased action, and convey the disease, in greater or less intensity, to the whole of the globe. In those cases, again, in which the posterior part of the retina is attacked, these vessels are, from their situation, exempt from the excitement, and the disease thus remains insulated, unless it should gradually extend to the anterior margin, when they become involved, and the barrier is at once overcome. This seems to be the explanation of what is observed in certain cases of internal ophthalmia. There is rapid extinction of vision, intense pain, photophobia, and photopsia, but no external appearances commensurate with the severity of the symptoms; this continues for a longer or shorter period, during which we may suppose that the inflammation, having commenced at the deepest part of the retina is gradually travelling forwards; and accordingly, the period at which it attains the anterior limits is marked by the almost simultaneous implication of the whole of the contents of the globe.

The diagnosis of acute retinitis is sufficiently simple, the symptoms being so strongly marked that they cannot be mistaken; but it is impossible, at the commencement of the attack, to predict whether or not the inflammation will extend to the other membranes. This information, could it be gained, might modify the prognosis, as the complicated form seems to be much more intractable and fatal to vision than the simple; fortunately, it is of no importance as regards the treatment, which ought to be the same in both forms of the disease.

From the extreme intolerance of light and tenderness of the eyeball, it is impossible to make a minute examination without employing considerable force, and subjecting the eye to much rough handling; this is attended by great pain to the patient, and probably, also, by serious injury to the retina from the sudden access of the light; therefore, as the information it would convey is of no practical value, it would appear to be better practice to rest content with the occasional glimpse that may be obtained by the voluntary efforts of the patient in a darkened room. It is true, that the pain and spasm might be overcome by the employment of chloroform, but it is questionable whether the retina might not suffer an equal amount of injury from exposure to the light, though the patient might be in a state of unconsciousness.

It will be observed, that, in the treatment of this case, notwithstanding the severity of the symptoms, neither general nor local bloodletting was employed; that reliance was placed exclusively upon mercury, and that recourse was had to tonics at a very early period. The same general plan was adopted by Mr. Cooper, and with equally fortunate results.

This is not in accordance with the views of the great majority of authors upon this subject. Free local and general bleeding, even "coup sur coup," after the manner of M. Bouillaud, and general antiphlogistic measures, of the most energetic character, are almost universally enjoined. Mr. Tyrell and Dr. Jacob are almost the only British writers on ophthalmic disease who have pointed out in strong terms the injurious consequences of copious depletion, and the advantages to be derived from an opposite plan of treatment, especially among the class of hospital patients. I believe I am correct in stating, that these views have now been adopted by the great majority of those who have an opportunity of seeing much of the diseases of the poor in large cities; and that the sanguinary measures which may have been required by a more robust generation have been now completely abandoned.

M. Desmarres strongly recommends in these cases the repeated evacuation of the aqueous humour; but, as he does not speak from experience, the propriety of this plan may be questioned.

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CONTRIBUTIONS TO DENTAL SURGERY.

By C. SPENCE BATE, Esq.

ON IRREGULAR TEETH.

Perhaps, in order to derive the greatest advantage, in a practical point of view, there are few departments of dental science which more require the combined research of a large number of the Profession than that which is the subject of this paper.

The knowledge which we have of the history of the teeth, and the lesions to which they are liable, teaches us that much of their beauty, health, and permanent durability depends upon the position which they respectively hold in relation to one another in the jaw, and that much of the grace in the expression of the human countenance is the result of a set of well-developed teeth, forming a perfectly normal arch. Then valuable indeed must those researches prove which assist towards an approximation of overcoming the difficulties which interfere with such result.

That much yet the most skilful have to learn, I think the following history of an anonymous case will show,—anonymous both as to patient and parties consulted, for it is not pleasant to mention names unless we can do so with praise. It alludes to a young lady of very prepossessing appearance, except for a most unsightly disarrangement in the placement of the teeth.

Unfortunately, she is the member of a family, though amiable and pleasant in all the duties relating to social intercourse, yet incapable of placing confidence beyond the limits of their own small conception, and to this, I believe, is due much of the result which still leaves a shade upon the value of the opinion of more than one who had been consulted.

The jaw was always cramped and narrow, and the teeth large and well developed, and was precisely one of those cases wherein much attention was necessary; the permanent teeth cut the gums in every instance without absorbing the fangs of the deciduous set; and, if my memory is not peculiarly treacherous, nearly all the deciduous teeth were removed in order to permit the others, already grown, to fall into their more regular position. The laterals, as may be seen from the adjoining figure, (*Fig.* 1), made their appearance behind

Fig. 1.

the normal arch; the result was, that the deciduous lateral incisors were removed, and not at all improbable that the deciduous canines were also taken out. The bicuspids next came into sight, holding their natural position, but approximating so near the lateral incisors that the canines could possibly have no room to permit them to occupy a position in line with the rest, and therefore were driven through the gums external to the arch, tusk-like and unpleasing. This position of the canines must have been the great impediment which precluded the laterals from being forced by the natural pressure of the tongue into regular line with the two central incisors.

It is not my intention to discuss how far it might have been within the reach of other treatment to have precluded such a relative position of the teeth; but, since such was the case, faithfully to record the history of the treatment pursued, and the result attained.

The teeth were in the position as shown in the cut when she was about 12 years of age, with the exception that the two first bicuspids were not removed when the child was

brought to me, after a long absence, for my opinion, which was, without hesitation, "the removal of the first bicuspids, together with the adaptation of mechanical means," which should be so employed as to force the lateral incisors forward, and at the same time bring the canines back.

The sound of a plate was intolerable, and the idea shook the confidence of my hearers as to the value of my opinion.

At their request, I took an impression of the child's mouth, and the model was sent to town, and a "most decided opinion" obtained, that, upon the removal of the first bicuspids, nature had sufficient power to restore the deformity to its normal regularity, even though, as was the case, the anterior face of the lateral incisors struck posteriorly to the opposing teeth in the under jaw.

A year passed away, and I again saw the child; when I was told by her friends, that I might do what I liked, except put a plate into the mouth. But I saw no reason to change my opinion, which had been strengthened by that of a dentist whom I had consulted, and in whose judgment I have great confidence; and, besides, I would not accept a case trammelled by similar conditions; and so a second year was allowed to pass, with only the additional assistance of a long stick or pole (recommended by the party previously consulted) to be used to push back the canines.

Time told its tale; the stick failed in its work; and a doubt sprang up as to the correctness of the opinion given.

Another was consulted, and pronounced (so said the child's father) the capability to restore the teeth to regularity not to exist, the child now being 14 years of age. This or a similar opinion was given by one or two others of equally high repute; and the result was, that the lateral incisors were removed, and now the mouth exists with four teeth in the front, to occupy the place where eight usually stand. I see her often, but always with regret and reproach; regret, that a face otherwise so pleasing should be in this way spoiled; reproach, that we are still so far behind that we should not have known there was but one right way, and that our judgment had failed because it had not been unanimous.

My own connexion with this affair is such, that none but the most illiberal will see aught but honesty of purpose by the detail. That I wish to press strongly on the minds of the Profession, that much is yet done, even under the direction of the most experienced practitioners, (for they all stand high, none higher, in reputation, and justly so too, who were consulted,) which cannot, judging by the result, be pronounced either skilful or correct. Then would it not be wise, nay, is it not a duty which each owes his neighbour, that all should combine, that each should dot down his own experience, and so enlarge his sphere of doing good.

I have seen a child take up a stone and fail to hit the mark at which it aimed; I have seen it followed by another from a man's nervous arm, while emulation still made others repeat the act, until the mark was struck, and so success resulted from the young child's first endeavour.

If this small cast of mine be just as fortunate, it will afford a little pleasure to remember.

It is not my intention to speak of any cases of ordinary regulation, such as those which occur when children shed their teeth, and is corrected by the removal of those teeth which, in the ordinary course of nature, should have been previously dislodged by a more speedy absorption of their fangs.

I believe the opinion is fast gaining ground, that much more injury of a permanent character is done by the too early than the too late removal of the deciduous teeth.

It should be remembered, that bones only grow at the extremities, and that the simphysis of the lower jaw has become obliterated by ossification, and the right and left bones unite to form one; thus no growth can take place except at the posterior extremities of the jaw.

But nature has ordained, that the space occupied by ten deciduous teeth shall, upon their being removed, be replaced by the same number of a more permanent character; but although this may be the case as regards the whole, it is not correct in relation to each separate tooth, some of which are larger, while others occupy less room; and the object of the dentist is so to economise the space that the new ones may be enabled to take possession of the whole; for this purpose, with discretion, it may be said, we can scarcely keep the deciduous teeth in too long, for the fangs, by their position, act as wedges between the new developed teeth, and preclude a too great tendency of compression from the lateral pressure of the posterior teeth.

This, which appears to me to be a sound reason for precluding too early an interference with the incisor teeth, becomes increasingly so in relation to those teeth which are later in their progress through the gums, insomuch that the evil is extended over a larger space in the jaw, and a greater extent in relation to time.

Independent of the advantage which the presence of the fangs may have in a mechanical point of view, as above stated, it can scarcely be expected that the deciduous tooth can be forcibly removed from its position, which is in immediate contact with soft vascular tissues connected with the new organ, without a liability to interfere with its healthy action, even in single teeth; whereas, in the double teeth, any irregularity or distortion of the fangs may so hug the new incomplete organ, as to bring away the permanent tooth in its grasp. *Fig.* 2.

It is such a case I figure here, which could not have occurred had time been granted, so that the natural absorption of the fangs had not been interfered with.

In this case, the tooth was not, I believe, removed with a view to accelerate the regular position of the teeth, but was demanded in consequence of great suffering on the part of the child; and the practitioner who sent me the specimen is by far too careful an operator, and stands too high in reputation, to suppose that less than the greatest caution and skill had been exercised. But still I contend, that the result proves, that the tooth was removed earlier than was conducive to the normal character of the permanent set. Although, happily, such accidents are not of frequent occurrence, yet the possibility shows the liability; and when this has once been demonstrated, he who risks the chance must undergo the charge of rashness.

But it must sometimes occur that caries has so early progressed, that the pulp of the deciduous teeth may become liable to the influences of external agencies. It is a great comfort to remember, that odontalgia in children is generally of so mild a character, that fomentation of hot water and a mild aperient will seldom fail speedily to remove it, and that it is of the highest importance that they should be preserved as soon as relieved, by being filled; but, in case of failure, or the tooth being in a state too carious to bear the force necessarily required for such an operation, I believe the most proper and scientific mode of proceeding is to excise the crown, and leave the fangs behind; these act the part, as I have before observed, of wedges, and prevent the posterior teeth from dropping into the alveoli, rendered vacant by their removal.

It may be brought in argument, against the plan of excision, that it has been found, as in cases of pivotting a new crown on the fang of a permanent incisor, that much pain and suffering may follow the operation. It may be also said, that when a tooth has been broken in the operation of extraction. Great inflammation and worse pain often follow than existed before the operation was attempted.

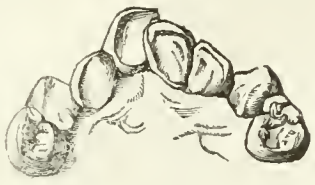
These are cases of failure, and not the evidence by which a successful operation should be tested. If excision of the deciduous teeth, such as under certain circumstances I recommend, be performed upon a similar plan, the result will be the same; but, if the operation be performed so as to remove the crown with a clean division, so as to bisect the nerve pulp nearer to the roots of the tooth than its bulb, so as to carry the latter clean away with the chamber in which it exists, at the same time no splinter of the tooth be allowed to remain,—if this be done, and the operation performed with a steady hand, so that no dislocation be given to the fangs in their connexion with the walls of their alveoli, experience has taught me through the last twelve years, that no disagreeable result will follow as a consequent of the operation in deciduous or permanent teeth.

Still there are cases where even this cannot be recommended; for instance, where the teeth are loose, or the source of irritation to the surrounding tissues. The surgeon must judge of the influence which local irritation may have upon the general system, and not forget that much of the future health of the teeth depends upon that of the whole body.

The power which the posterior permanent teeth, during their development, exercise upon those which are situated anteriorly to them in the jaws is shown to commence at an

early date, by the history of the following case, represented by the subjoined cut.

Fig. 3.



It is that of a child about five years of age, in whom, as its mother tells me, the teeth were originally developed in their regular or normal position; but about twelvemonths since she observed the central incisor to be pressed forwards, which continued to increase until it became as at present figured. The permanent molars will not cut the gum, most likely for a couple of years, and it is not improbable that the irregularity may still increase; the projecting incisor is loose, and will certainly be displaced before its permanent successor has sufficiently progressed to supply its place. What may be the future history of the case we cannot tell; but a serious disarrangement of the second set will most probably be the result.

The whole of this compression of the teeth I think must be attributed to a want of corresponding growth in the jaws to admit of the presence of the permanent teeth, the molars of which press so strongly against the anterior teeth that they are driven out of their position.

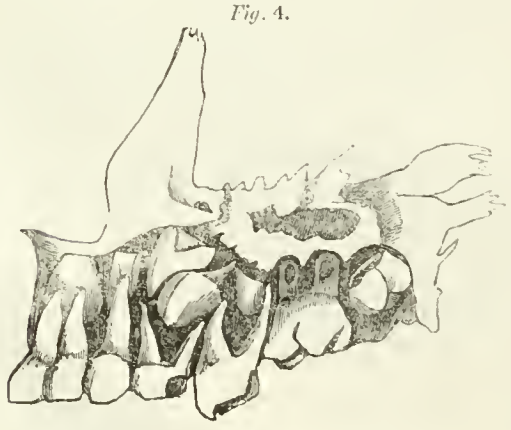
The child is healthy, but of a very peculiar countenance, probably arising from the great projection of the brows over the eyes.

After the first molars, the teeth of both the upper and the lower jaws which make their appearance through the gums are the central incisors, and these are followed so quickly by the laterals, that should they (the centrals) be at all irregular in their position, the short time which the deciduous laterals would retain their place can have no comparative influence upon the whole, equal to the advantage gained to these teeth by the regularity obtained through their removal; but the probability is, that in consequence of such a proceedure being necessary, the lateral will be jammed between them and the canines, and driven out of the line of regularity in the dental arch; this the more readily, since the normal position of the tooth when in progress of development within the jaw is diagonal on its own axis, as compared to that which it will assume when permanently developed.

Where such is the case, the usual practice, almost I believe universally adopted, is the removal of the adjoining tooth, viz., the deciduous canine, which produces the desired effect, and the irregular lateral drops into line with the teeth already developed.

The next in order which nature produces are the bicuspids, the permanent canine being deeply imbedded in the jaw. (*Fig.* 1.) These have a tendency to press forwards, owing to

Fig. 4.



the pressure of the teeth which are in progress of development at the rear of the jaw; unfortunately, the removal of the deciduous canine at a period long anterior to that when its permanent representative can occupy its place, by rendering vacant so large a chasm as its own alveolus becomes, must tend to accelerate this evil; and it results as a natural sequence that the permanent bicuspids and the lateral incisors will closely approximate each other; later in the history of the teeth (about two years after the incisor) the canine will be found pressing to come through; but finding its natural position pre-occupied, by force of its own growth, it is driven within or without the arch, which latter is the most common form of irregularity which this tooth assumes.

Not only the position which the bicuspid and incisor teeth hold in relation to each other, induces this displacement of the canine, but tends greatly to retard it from completing its full development; and thus it is not unfrequently the case, that the canine shall not progress beyond a mere protrusion through the gum, existing a tooth in name, but useless as an organ, or, in the most favourable of cases, can only be restored to the line of beauty and usefulness by the loss of some other permanent tooth. In order to preclude such consequences, it becomes a scientific dentist to adopt those means which shall best preserve intact the space allotted to the new teeth, upon the removal of their former representatives. This has, no doubt, occupied the attention of many; and Mr. Bridgeman, of Norwich, has suggested the application of mechanical means, ("Forceps," Vol. II., p. 58,) in order to keep open the space left by the removal of the deciduous canine; but this must naturally be ineffective in its result, inasmuch that the pressure required to fulfil such a purpose must either preclude the lateral from assuming its normal position, or it must encroach upon the space left, to admit of which encroachment the canine tooth had been previously removed. M. Toulon, in a memoir read at a Session of the Royal Academy of Medicine, Paris, suggested the application of pressure to the whole series of teeth, so as to enlarge the arch of the teeth and the dimensions of the palate, until it was of sufficient range as to grasp all the teeth in an even line. (Forceps, Vol. I., p. 69.)

The plan which I adopt, and which, although it originated independently, and had been carried out in my practice previously, with cautious timidity, being then a young practitioner, still it would be unjust not to acknowledge the confidence I received from a short paper in the "Forceps," Vol. II., on the same subject, published by Mr. Lintot, wherein he states, having pursued an important portion of the treatment which I propose, although the remainder, to which he has not applied, I contend to be equally essential to the successful issue of the case.

Nature should be followed, and it is the discovery and close approximation to her plans that is the path of science.

The succeeding tooth which is shed to that of the incisors is not the next in position, but the two molars, which are posterior to it in the jaw. If nature plans it so, is science to contest the law, and try to rule it different? He who does, may regulate the incisors, but he will render distorted the relative position of the others.

We can scarcely do better than follow the order of succession; and when the lateral incisors of either jaw be compressed, or distorted from their natural position, the right tooth to remove is one of the deciduous molars, the most useless, either from caries or other causes, reserving in preference the posterior.

This, so far, agrees with Mr. Lintot—nature being left to fulfil the rest. But my own experience teaches me, that they who expect a happy result to follow with no other artificial interference, will risk disappointment; for the posterior teeth are more apt to be pressed forward from the growth of the permanent molars than the canines to yield their position to the lateral pressure of the growing incisors.

Believing this to be the case, it is my usual rule to slip a ring, made of vulcanized India-rubber, over the canines, and, if possible, over the second deciduous molar; thus assisting the pressure of the growing incisor to push the canines away, which, upon being sufficiently removed, the band should be transferred from the canine to the incisor, taking care that it should pass the canine, so as to make it serve as a pulley on that side which shall force the irregular tooth into its normal position. Caution should be taken whenever an India-rubber ring is used that it be not too strong, since the pain and inflammation which would

thereby ensue is liable to prove of great inconvenience as well as suffering.

I have found this a simple, easy, and safe mode of treatment; the bicuspids now develope themselves in their natural position, while the deciduous canines reserve a place between them and the incisors for development of the future permanent canines. Thus regularity of position is obtained by a far more certain and less painful process than the one usually adopted.

[To be continued.]

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

By HARVEY LUDLOW, Esq., M.R.C.S.E.,
Late House Surgeon.

ON INJURIES OF THE ARTERIAL SYSTEM.

The following cases have occurred in the practice of the hospital during the last three years, and may, perhaps, be considered not unworthy of attention, as they illustrate points in surgery neither surpassed by any in importance or inferior to any in interest.

COMPOUND COMMINUTED FRACTURE OF THE LEFT SUPERIOR MAXILLARY AND MALAR BONES, FOLLOWED BY PROFUSE ARTERIAL HÆMORRHAGE FROM THE PTERYGO-MAXILLARY FOSSA.

Case 1.—Harry Dicketts, aged 34, was admitted May 28th, 1850, at 5 p.m., under Mr. Stanley, with severe contusion of the whole left side of the face, and an irregular wound over the zygoma, attended with laceration of the deep tissues, and with fracture of the malar and superior maxillary bones. The injury was occasioned by a blow from the iron handle of a powerful crane, whirling round with terrific force under the traction of a heavy carriage, whose weight had overpowered the arms of himself and a companion engaged in lowering it. He was knocked down, and blood issued so freely from the wound in his face, that he soon felt faint. No time was lost in bringing him to the hospital; but, on his admission there, the bleeding had ceased, and a deep wound, or rather a complete smash of the upper and posterior part of the left cheek, comprising the posterior portion of the malar bone, zygomatic process of the temporal, and tuberosity of the superior maxillary, was all that appeared. The contusion attendant on so violent a blow had produced great swelling of the face, and such ecchymosis of the lids, that the eye could not be opened.

His occupation was that of a coach-painter; his habits were temperate, and constitution vigorous.

Shortly after admission he was put into a warm bath, in accordance with the rules of the hospital; (a) but, he had scarcely entered it, when the wound began to bleed with great freedom, and continued to do so for five hours, notwithstanding incessant attention.

Removal of the clots, and exposure of the bleeding surface to the air, the application of ice, and compression of the common carotid in the neck, (a proceeding which caused great pain,) were all ineffectually tried. At length, however, the house-surgeon, Mr. Archer, succeeded in arresting the hæmorrhage by plugging the wound with pads of lint, steeped in the tinct. ferri sesquichlor. The patient lost a large quantity of blood, his shirt and bed-linen were quite saturated, and his pallid face and feeble pulse told how great had been the drain on his system.

29th.—No bleeding occurred in the night; his pulse was very feeble; countenance pale and covered on the left side with black masses of dried blood. There was great swelling of the face, and both eyes were closed from swelling, and ecchymosis of their lids. He complained of feeling very weak.

Ordered milk diet, with two pints of beef-tea daily.

About the middle of the day there was slight recurrence of the hæmorrhage, and, as it had not ceased at 5 p.m., Mr. Stanley directed the plugs of lint to be removed, and the wound to be exposed. When this had been done, the impossibility of securing the bleeding vessel by ligature, or torsion, was apparent, for the blood welled up from the bottom of a deep pit, in which no object was distinct. The wound was filled with crumbled leaves of matico, over which pads of dry lint were placed, and tightly secured by strapping. By this method the hæmorrhage was controlled.

As the act of mastication necessarily interfered with the tranquillity of structures adjacent to, and involved in, the injury, he was not permitted for two days to take any food by the mouth, being nourished by injections of strong beef-tea.

Fortunately there was no return of the bleeding. In three days the wound began to suppurate, and discharge escaped from beneath the dressings. These, however, were not touched till June 1, when the exterior pad of lint was removed and a bread poultice applied over the left side of the face. The remainder of the lint and the matico were gradually discharged, and, on June 3, the wound was seen to be clothed with granulations, and secreting a quantity of strong-smelling pus.

The wound filled up, and the swelling of the face subsided. Three days after admission an attack of inflammation came on in the right forearm, around a slight wound which was inflicted simultaneously with the injury to the face; this, however, readily yielded to leeching and poultices. During the first week of his sojourn in the hospital, some difficulty occurred in overcoming the constipation of the bowels, and it was found necessary to relieve them by injections of gruel. A nutritious, unstimulating diet was allowed him, and though his debility was such, that on rising from the bed four days after the accident, he fell back and fainted, yet he made rapid progress to recovery, as the following note, taken on the 18th of June, will testify:—

"His condition is in every way satisfactory. The wound has nearly filled up, and is much contracted in superficial extent. He can move his lower jaw pretty well, and without much pain."

He left the hospital at the end of June, quite restored to health.

In the above case, the operation of securing the bleeding vessel at the point of injury would have been impracticable, and had the hæmorrhage continued, Mr. Stanley was resolved to tie the common carotid artery, believing that the patient would receive more complete security from such a proceeding than if deligation of the external carotid were practised. The case also affords an example of the constipation following large losses of blood, alluded to by Mr. Skey in his Work on "Operative Surgery."

SMALL PENETRATING WOUND OF THE FOREARM PIERCING THE ULNAR ARTERY, AND CAUSING EFFUSION OF BLOOD.

Case 2.—Thomas James, aged 15, was taken into St. Bartholomew's Hospital, November 16, 1850, on account of a diffused swelling of considerable size, which existed along the inner side of the right forearm, and was placed over the upper two-thirds of the ulnar artery. The tumour was felt to fluctuate obscurely, and slight ecchymosis was manifested in the skin that covered it. The cicatrix of a small wound was visible about midway between the bend of the elbow and the wrist, corresponding almost exactly to the middle of the ulnar artery. Not the slightest pulsation was perceptible in the tumour, nor was any bruit audible on the morning of his admission, although, in the afternoon, after the arm had been freely handled, many gentlemen heard one distinctly.

The boy was a doll maker, and, a fortnight before his admission, while engaged in his work, he wounded his arm at the spot indicated by the cicatrix with a long narrow knife, which pierced, according to his statement, to the bone. Very little bleeding ensued. A week elapsed from the injury before the arm began to swell, and then a gradual enlargement took place, which went on increasing for four days, since which time he considered it had been slowly diminishing, and, at the period of his admission, he believed that it was subsiding.

By this history the case was rendered very obscure; a consultation was held respecting it, and several examinations of the arm were made. Both radial arteries were found beating with equal force, but the pulsation of the ulnar in the affected arm, though evident, was much enfeebled. Shortly after his admission, the boy was seen by Mr. Hodgson, and that gentleman came to the conclusion, that the main artery had not been wounded, for the following reasons:—1st. Because the hæmorrhage following the infliction of the wound had been so trivial. 2ndly. Because the tumour did not pulsate. 3rdly. Because the swelling did not begin till some days subsequent to the injury, and latterly had rather diminished than increased. Mr. Hodgson felt disposed to think it was an abscess. Both Mr. Stanley and Mr. Skey expressed themselves as quite uncertain respecting its nature. Mr. Lloyd was inclined to believe the ulnar artery had been punctured, but, considering the doubtful nature of the case, he determined to wait till the following day before adopting any decisive treatment respecting it.

In the evening, no increase of the swelling had taken place, but an aneurismal bruit was distinctly audible, so that it now seemed pretty clear that the artery had been wounded. Still there was not the least pulsation of the tumour.

On the following morning, the bruit was again clearly heard; the lad was, therefore, brought into the theatre, in order that the wounded vessel might be secured.

(a) Every patient, on admission, has a bath, unless his medical attendant forbids it.

Mr. Lloyd made an incision into the tumour, three inches long, over the course of the upper third of the ulnar artery. A large quantity of coagulated blood was exposed, and cleared out from beneath the integument and between the muscles; after which the artery was found at the bottom of the wound, and seen to present anteriorly a small aperture, at a point corresponding in situation to that of the cicatrix in the skin, secured above and below the puncture. The vessel was in its wall. The wound was brought together by sutures, and water-dressing applied to the arm.

The next day, faint pulsation could be felt in the ulnar artery below the ligature. Numbness in the fingers, supplied by the ulnar nerve, existed for two or three days. Both ligatures came away eight days after the operation. The wound healed by granulation, and the lad left the hospital December 19th.

PENETRATING WOUND OF THE FOREARM—PUNCTURE OF THE ULNAR ARTERY.

Case 3.—William M'Kenzie, aged 28, was admitted January 20th, 1852, under the care of Mr. Paget.

The left forearm was much enlarged anteriorly, and an oblique wound existed on the ulnar side, corresponding to the upper ulnar border of the pronator quadratus. A dirty grumous clot protruded through the skin, pulsation was evident in the swelling, and a bruit could be heard with the stethoscope. The man was pale and weak from repeated losses of blood.

Three weeks before admission he wounded his arm, while cutting a piece of holly. A jet of blood followed the knife, and the arm began to swell rapidly. He bound his handkerchief tight round the wound, and so prevented the loss of more than a teacupful of blood. Afterwards he applied to a surgeon, who directed him to bathe the arm in warm water and use poultices. All went on well for a week, but at the expiration of that time bleeding from the wound occurred, and he lost half a pint of blood before the hæmorrhage could be controlled. The arm, which had almost regained its natural size, again became largely swollen. On the arrival of a surgeon, a compress and bandage was applied. Subsequent to this date, however, hæmorrhage occurred repeatedly; for whenever the bandages became slack, owing to the diminution of the swelling in the arm, blood issued freely. During the third week after the accident he lost in the middle of one night more than two pints of blood.

Having squeezed out a quantity of grumous clot, Mr. Paget made an incision upwards from the wound, along the course of the ulnar artery, about four inches in length. The loose coagula which everywhere pervaded the inter-muscular spaces and muscular tissue rendered it extremely difficult to discover the vessel. It was found at length, pushed quite out of its course by the clotted blood in its vicinity, and itself plugged by a coagulum for some distance upward, so that no pulsation was perceptible in it. Mr. Wormald, however, having succeeded in finding the aperture in its wall, passed a probe into the interior of the vessel, and displaced the clot. Arterial blood freely followed. Double deligation of the artery was then practised.

For some days after the operation, the man complained of coldness and loss of sensation in the ring and little fingers, extending thence to the wrist. Indeed, more than three weeks elapsed before the natural sensibility returned. The wound threw up granulations, and quickly healed, and, though the movements of the fingers were for some time greatly interfered with, the patient gradually regained their free use, and left the hospital, Feb. 22, quite well.

PUNCTURED WOUND OF THE RIGHT FOREARM, FOLLOWED, AFTER THE LAPSE OF A WEEK, BY PROFUSE ARTERIAL HÆMORRHAGE. — DELIGATION OF THE ANTERIOR INTEROSSEOUS ARTERY.

Case 4.—William Griffiths, aged 23, was admitted April 26th, 1852, under the care of Mr. Lloyd, having an oblique wound in the right forearm, corresponding in situation to the middle third of the ulnar artery. The injury had been inflicted four hours previously by a chisel an inch broad. There was no bleeding from the wound at the time of his admission; he was therefore sent to bed; the limb was kept in an elevated position, and water-dressing applied.

History.—A carpenter by trade happened to be carrying a chisel in the outside pocket of his shooting-coat, and, while in the act of jumping from a cart, drove it deeply into his arm. A stream of red blood spurted from the wound. Being at the time four miles from London, he bound up his arm tightly with a handkerchief, and went to a surgeon, who applied strapping and bandage. On arriving at his home, the wound bled again through the bandages, and he was therefore advised to seek relief at the hospital.

Eight days after his admission, profuse and alarming hæmorrhage occurred, which was commanded by the application of a tourniquet to the brachial artery, and a bandage to the forearm. The following day the tourniquet was removed, but no blood issued from the wound; the forearm was swollen and tense, and the man looked very pale, and was much enfeebled.

Bleeding took place on the 7th and 8th of May, though not to a large extent. The wound in the forearm now presented a sloughy aspect, and its edges were separated by a grumous, dirty-looking coagulum.

On the 8th of May he was brought into the theatre, and an incision made along the course of the ulnar artery, extending upwards from the wound. The clots were sponged away from the infiltrated muscles, and search made for the wounded vessel. Blood continued to rise from a point deep in the middle of the forearm, when pressure was withdrawn from the brachial artery. In this direction, therefore, the dissection was pursued. The median nerve, which appeared to have been wounded, was drawn to the radial side, and, at a little distance beneath it, the bleeding vessel was exposed, having a slit in its anterior wall, through which a probe was easily passed. Ligatures were applied above and below the wound. The depth at which the vessel was placed from the surface, and its situation in the middle of the forearm, proved it to be the anterior interosseous artery beyond a doubt. Water dressing was applied to the wound, and the man sent back to his bed.

There has been no recurrence of bleeding since the operation. Both ligatures came away in a week. The wound soon began to discharge and granulate actively. Neither before nor since the operation has it been possible to feel any pulsation of the ulnar artery in the injured arm.

The patient is still in the hospital, and has nearly regained the use of his fingers, whose movements suffered considerable impairment in consequence of the injury. The wound is contracting day by day, and its cicatrization advances with rapidity.

These three cases admirably exemplify the important fact, that wounds of the arterial system are not always immediately followed by profuse hæmorrhage,—such hæmorrhage as would indicate at once and conclusively the full extent of the injury. This circumstance is insisted on by Mr. Guthrie, and ably illustrated by numerous cases reported in his valuable work. The lesion of a large trunk, such as the femoral, is, indeed, almost invariably followed by immediate and abundant bleeding—bleeding which declares unmistakeably the nature of the injury, and which, unless promptly controlled, is soon fatal. The slight muscularity possessed by the walls of large arteries, and the force of the blood-current moving within them, fully account for the alarming hæmorrhage which occurs instant on their lesion. Devoid, or almost devoid, of contractility, and distended by a current of blood strong with the last impulse of the heart, they are able to offer no effectual resistance to hæmorrhage, or even to lessen the effusion of blood by contractile diminution of their tubes. But arteries of inferior size, in whose coats there is less of the elastic and more of the muscular tissue, are able, by virtue of the latter structure, to diminish their calibre, or even for a while to close themselves completely, under the circumstances of injury. Thus the flow of blood is lessened, and perhaps wholly checked; but general excitement of the system, either from the injury itself, or from some other cause, sooner or later supervenes, the circulation is carried on with stimulated vigour, while the muscular coat of the wounded vessel, fatigued by long action, becomes now altogether unable to withstand the increased impetus of the blood, relaxes its opposition, and hæmorrhage is the result. Now, if it were possible, by artificial means, to check or lessen, for a time, the stream of blood through a wounded artery, an opportunity for reparation would be afforded it, such reparation as, if completed, might restore the part to a condition of nearly perfect integrity, and render a long, tedious, and difficult operation unnecessary. In injuries to the radial or ulnar arteries, for example, a graduated compress applied to the brachial, and the pressure of a moderately tight bandage, from the fingers to the axilla, would, in all probability, succeed in establishing so desirable a termination; and, should they fail, the patient will be in no worse condition for the performance of an operation than before the attempt. Of course, it is not to be expected, that where a long slit has been made in an artery, spontaneous reparation will ensue; but the treatment by pressure is applicable especially to those cases in which the artery has suffered only a small puncture, or in which its penetration is suspected rather than known. I fully believe, that the timely and efficient application of compresses and bandages in cases of this description, would prevent the formation of false aneurism in many instances, and consequently the necessity of the operation adopted for its cure.

ST. GEORGE'S HOSPITAL.

By Dr. BARCLAY,
Medical Registrar.

SECONDARY DEPOSITS.

This denomination is perhaps objectionable as applied to the defined abscesses found in different parts of the body in fatal cases of suppurative fever, because it is apt to suggest the thought of syphilitic poison, of which the various events have been called, according to their acknowledged sequence, secondary and tertiary affections; and it might be advantageous to define this condition more precisely as secondary purulent deposits. The term in itself is a rational one, because it conveys a just idea, and serves to impress upon the mind the true nature of the disease; not that the whole abscess is nothing more than a deposition of pus from the blood, but that it owes its origin to this cause.

The true relations of this subject were first observed with reference to the consequences of operations, where it was shown, that on some occasions during the progress of suppuration the whole blood became tainted with pus, to which the name of "pyæmia" has been applied, and that the pus-globules were very apt to become impacted in the minute capillary vessels, and there become foci of inflammation and suppuration. That these are not the only circumstances in which such events occur, the subjoined cases must prove; although we have yet to learn the causes which determine, in these and similar instances, the presence of pus in the blood, while others apparently similarly situated escape.

Case 1.—The first case here detailed appears to have commenced as subacute rheumatism. Several similar instances have occurred while I have held the office of Registrar at this Hospital, in which the patients were admitted with inflammation attacking several joints at the same time, and therefore believed to be rheumatic, which has gone on to the formation of pus in and around the joints, and not unfrequently to the formation of secondary abscesses in various parts of the body. Most of these have presented acute symptoms; they have chiefly occurred in persons of dissipated habits, and have always been attended with great prostration, excessive perspiration and tremor of the limbs, and not unfrequently with delirium, which has borne a strong resemblance to delirium tremens. The present case was of much milder character, and there was no reason whatever for supposing that suppuration had occurred in the joint previous to the inflammation and suppuration of the testicle, and yet the section of that organ indicated just such abscesses as we find more commonly in other parts of the body when the presence of pus in the blood, and its detention in the course of the circulation is the known cause of the secondary suppuration, and precisely similar to those found in this case also in the larynx and in the lungs. The case derives great interest from the rarity of secondary deposits in these two situations, viz., the testicle and the larynx.

Michael H., aged 28, was admitted into St. George's Hospital, under the care of Dr. Bence Jones, on August 6th, 1851. He reported, that, after exposure to cold and wet, he had suffered from pains of a rheumatic character, which were chiefly confined to the left shoulder during a fortnight previous to his admission. He appeared to have been a man of rather intemperate habits, and generally not of strong health. When admitted, his pulse was rather quick, and the tongue furred; the shoulder was tender, and moved with difficulty; but there was externally no inflammation or swelling. In this state he continued during the first four or five days, no acute symptom manifesting itself, and the pain being confined to the left shoulder; his tongue, however, continued foul, and he had some degree of sickness. On the 12th, the surgeon was called to examine the right testicle, which was swollen and tender, when he was ordered calomel and opium every six hours, and he expressed himself on the 16th as feeling much relieved, especially as regarded the pain in the shoulder, but the testicle was still much swollen.

On the evening of the 18th he had a distinct rigor, after which he sweated profusely; the pills were left off, and a saline draught with excess of ammonia given, and wine allowed him. Next day some abscesses formed on various parts of his body, two of which on the leg, and one on the left arm, were opened on the 21st. On the following day he was much lower; difficulty of breathing, with a sort of stridulous hoarseness, evidently referrible to the larynx, supervened, but not to such an extent as to threaten suffocation. The breath-sound in the lungs was loud, harsh, and bronchial, especially on the right side. The tongue was dry, pulse rapid, and he began to be delirious at intervals. Pustules formed over different parts of his body on the following day: his prostration greatly increased, consciousness was obscured, his breathing oppressed and heaving, pulse frequent and feeble. He sank rapidly, and died on the evening of the 24th.

Post-Mortem Examination Forty-three Hours after Death.—The body was not emaciated. On the outer side of the right elbow there was a small superficial abscess; and several pustules on the neck, body, and lower extremities; one or two small abscesses on the leg were open.

Left Shoulder-joint.—The capsule was slightly thickened; the synovial membrane contained some slightly turbid fluid, with small flakes of lymph and slight mixture of pus. A small spot of pus was found distinct in the substance of the left pectoral muscle.

Larynx.—There was considerable ulceration of the larynx, immediately below the true vocal chords, extending chiefly backwards, and also upwards, so as to implicate the aryteno-epiglottidean folds; around this ulcerated surface, which did not penetrate beyond the sub-mucous cellular tissue, were several spots of pus imbedded in the sub-mucous tissue; one of these was on the posterior surface of the epiglottis.

Thorax.—On both sides the pleuræ were firmly adherent for the greater part of their extent. The right lung was much congested throughout; on the posterior surface of the upper lobe were found spots of lymph and pus immediately under the serous covering. In the left lung, one or two spots of a similar character were also seen, but this lung was much less congested than the other.

Abdomen.—The viscera all healthy.

Scrotum and Testis.—The right half of the scrotum was very œdematous and dark-coloured; the right testis was enlarged to double the size of the other. The tunica vaginalis was slightly distended with straw-coloured serum, and the opposed surfaces were adherent through masses of recent lymph. The testis was much congested and inflamed, and in its substance were deposited small masses and spots of pus.

Case 2.—In the second case, the secondary suppuration had commenced before the patient's admission; but, from the history of the case, it was evident that uterine phlebitis had been the primary cause of the absorption of pus; and the case is interesting, as showing how the ordinary white-swollen leg of childbed may pass into a much more formidable and fatal disease, when the whole blood becomes poisoned by the presence of pus-globules, and these become the foci of secondary suppurations throughout the body.

C. W., aged 22, married, was admitted on the 17th February, three weeks after her confinement. She had been suffering ever since from severe pain in the abdomen, with rigors and copious perspirations; the right leg had become painful a week after her labour, the right hand and arm a week before admission, and the left hand only three days ago. The lochial discharge had ceased. Her face was emaciated, and the expression rather anxious; pulse 160. There was a large slough on the dorsum of the right foot, and pain, increased by motion, was complained of in the knee and ankle of the same leg, which was swollen throughout. The left knee and ankle were also slightly swollen, and were very much more painful than the right. On the back of the right wrist there was an abscess, which was opened soon after her admission into the hospital, and contained a quantity of greenish pus and a large slough—a few days later a similar one was opened on the left arm. She had been occasionally delirious during her illness. She had been under treatment, and, in addition to internal remedies, she had had fomentations, sinapisms, and blisters, the last giving her most relief. An attempt had also been made to limit the inflammation in the leg by the application of caustic, but ineffectually. Opium was given her at bed time, and bark with acetate of ammonia three times a day; wine and nutritious diet.

The tongue became more dry, the face was yellowish, she complained of nausea and thirst, and her cough was urgent, in consequence of which the bark was omitted on the 19th, and saline draughts, with excess of ammonia, substituted. But the respiration became more hurried, the face flushed, the tongue dry, and there was occasional delirium. On the 22nd, diarrhœa set in, but was checked for the time by chalk mixture and opium; and on the 25th, another abscess, which had formed over the right shoulder, was opened. There seemed to be some disposition to rally, and a drachm of the compound tincture of bark, and three grains of ammonia, were given in camphor mixture three times a-day.

She went on rather favourably for a few days, when diarrhœa again set in very severely on the 1st March. The abscesses which had been opened showed no tendency to heal: the tendons on the back of the wrists and feet were exposed, the tongue became aphthous, and the dyspnœa urgent; the body was covered with cold perspiration, the face became sunken and anxious, and she died exhausted on the 4th March.

Post-mortem Examination Thirty-two Hours after Death. — *Articulations.*—The left knee was enlarged; it contained a large quantity of darkish purulent looking matter, and at the inner side was an opening which communicated with a long sinuous abscess reaching as far as the upper third of the thigh under the muscles. In both ankle joints was much purulent matter, without much sign of inflammation; the cartilages were much absorbed, and on the denuded bone were one or two small vascular patches. The left wrist was similarly affected; the right wrist and ankle were healthy.

Thorax.—The left pleural contained a small quantity of serum, and some shreds of recent lymph; the membrane was very vascular. The lung was pale and emphysematous anteriorly, but congested behind, and the lower lobe and part of the upper lobe were inflamed and consolidated. The divided terminations of the small bronchi poured forth purulent fluid, and, being surrounded by portions of yellowish consolidated lung, gave the appearance, at first sight, of minute purulent deposits. The right pleural cavity contained some soft yellowish lymph, with one or two adhesions. The lung was pale and emphysematous anteriorly, and, on section, was found full of frothy serum and crepitant throughout, except at the margin of the upper lobe, where it was somewhat consolidated, and presented a portion, to the extent of about a shilling piece from which much purulent matter exuded on pressure. At the upper part of this lung some of the bronchi presented the same appearance on section described as found in the lower part of the opposite lung. The heart was healthy.

Abdomen.—Several old adhesions existed in the peritoneal cavity. The broad ligament and the peritonæum in the pelvic cavity were much congested, and the ovaric veins enlarged and tortuous, the right one being surrounded by a quantity of purulent matter in the sub-peritonæal tissue at its lower part, and filled with coagulum. The ovary on this side and the Fallopian tube were closely matted together, and there was pus in the sub-peritonæal tissue around the ovary, which was itself healthy. The tube itself also contained purulent fluid. The left ovary and uterine appendages were only congested. The uterus was large; its walls were thinned, and contained pus in its structure in the vicinity of the right cornu. Its cavity was dilated, and the lining membrane intensely congested, and covered by a watery bloody fluid; its anterior portion was shreddy and vascular.

The intestines presented patches of vascularity in the ileum, and several ulcerations in the cœcum of various sizes, with great vascularity. The kidneys were very vascular, and some yellow deposit was found at the apex of one of the pyramids in each; it was firm and striated, and seemed to be deposited between the tubes. The spleen was very soft. The large veins contained much coagulated blood.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

NEWCASTLE-ON-TYNE INFIRMARY.

By G. A. HUTTON, Esq.

CASES OF ANEURISM TREATED BY PRESSURE.

Case 1.—J. B., aged 48, blacksmith, admitted October 30, 1850; a pale, sallow-looking man, a hard liver and drinker; has popliteal aneurism of the right extremity, which commenced six months ago as a small pulsating tumour. He did not pay much attention to it, until pain and numbness of the limb and increase of the swelling obliged him to lay up.

At present, the foot and leg, up to above the knee, are much swollen and cold; the knee is a good deal bent and fixed. The limb around the tumour measures in circumference 20½ inches. The opposite limb at the same part 12½ inches.

To be kept quiet, and a cold lotion applied to the part.

Nov. 3.—The screw tourniquet of Weiss applied to the femoral artery.

4th.—The leg is more swollen; there is some ecchymosis over the tumour, and at one side of the patella. The leg and foot are quite warm. He bears the pressure tolerably well. Two tourniquets are in use, which are slackened alternately, in order to avoid pain and excoriation.

The increased swelling and ecchymosis appear to have been caused by the pressure produced when making a cast in plaster of Paris of the tumour.

15th.—The ecchymosis is fading; he now bears the pressure much better.

The limb to be firmly bandaged from the toes, and the pressure continued as before.

20th.—Mr. Bellingham's instruments for applying pressure were substituted for those of Weiss.

29th.—The tumour is diminishing in size; the patella is more defined, and the ecchymosis nearly gone; general health improved.

Continue as before.

Dec. 13.—The bandages removed from the limb. The tumour continues in the same state as at last report; has no pain; bears the pressure well.

Continue as before, but the pressure to be relaxed a little.

Jan. 10, 1851.—Compression removed altogether; no pulsation can be detected in the tumour; the articular arteries are felt distinctly pulsating. The tumour is not much diminished in size, but it has a soft, elastic feel.

An elastic bandage to be applied to the limb.

24th.—Since last report, he has continued to improve; complains of no pain; gets up and walks about on crutches. The tumour remains in the same state.

Feb. 4.—He is very unwell; erysipelas commencing about the knee of the affected limb.

9th.—The limb is much swollen; the erysipelas now extends from the toes to above the knee. The tumour fluctuates distinctly.

12th.—The tumour burst to-day, and about 12 ounces of dark matter, resembling coffee grounds, were discharged, but there was no hæmorrhage.

23rd.—He feels much better; considerable discharge from the opening in the tumour. Several portions of firm coagula of blood have been evacuated; no hæmorrhage.

March 16.—Since last report he has considerably improved; scarcely any discharge now; sits up and walks about occasionally.

21st.—He is very unwell again this morning; erysipelas present from the toes to above the knee; breathing with difficulty. These symptoms increased, and he sank and died on the 22nd.

Remarks, etc.—Previous to the examination of the limb, the femoral artery was injected with plaster of Paris. On dissection, the femoral artery was found injected down to the sac; the sac itself was filled with injection, lacerated in several places, and the injection extravasated into the surrounding tissues. The posterior tibial was partially injected. This case presents us with an instance of popliteal aneurism cured by pressure, but the ultimate result was unfortunate, the patient sinking at length from repeated attacks of erysipelas prevalent at the time. The patient was not a very favourable subject for any mode of treatment; his constitution had been injured by hard living; the tumour itself had attained great size, and interfered with the circulation of the limb, which was greatly swollen and cold. The complete cessation of the pulsation, however, and the absence of hæmorrhage when the sac gave way during the first attack of erysipelas, show that a coagulum must have formed at the entrance of the artery into the sac, thus cutting off its cavity from the general circulation. The coagulum was not probably very firm, as the injection was found after death to have found its way into the sac by the main artery. No conclusions adverse to the pressure treatment can be drawn from this case; erysipelas, indeed, would have been even more likely to have attacked the limb had a wound been made and the artery tied. In the broken down constitution, too, of this patient, the risk of purulent infection, which we sometimes see follow the most insignificant wound, would have been very great. The *post-mortem* examination shows that, as Mr. Bellingham has already stated, the artery is not obliterated at the point where the compression is applied.

Case 2.—The following case, which I have taken from Mr. Heath's Case-book, occurred before I became dresser.

E. O., aged 41, labourer at the Glass Works; healthy man, of temperate habits; admitted August 4th, 1848, with pain of the left knee, and swelling of the leg from the middle of the thigh down to the toes. The leg is very œdematous, and colder than the other. There is a tumour extending from about the lower third of the femur to two inches below the popliteal space, with distinct pulsation and bellows murmur in it. The circumference of the limb around the tumour is 20 inches; the opposite limb, at the same part, 15¾ inches. It was observed only a fortnight ago, and was then a considerable size. He knows no cause for it. General health good.

9th.—Pressure applied to the femoral artery with Weiss's screw tourniquet.

15th.—The tumour feels softer; the pulsation is much diminished; the circumference 19¼ inches.

22nd.—The tumour, and the general swelling and œdema of the

leg diminishing. The temperature of both limbs is now about the same.

Sept. 1.—Can now get up and walk about a little. No pulsation can be detected in the tumour. Popliteal space much more defined. Pressure removed.

29th.—Greatly improved; has no pain; the swelling is much diminished; can walk well now.

Oct. 15.—The circumference of both the limbs the same; a little hardness remains in the popliteal space. Cured.

This man remained perfectly well in the autumn of 1850.

Remarks.—This case affords a striking contrast to the preceding one, and presents us with a very favourable specimen of the pressure treatment. The patient, seven years younger than the subject of the first case, was of sound constitution and temperate habits. The case was so far complete at the end of three weeks, that the pressure was then safely removed, and the patient might have left the hospital a month earlier than he did, had it not been thought right to detain him for a time, with the view of watching the diminution of the sac. The cure of the disease was here effected as rapidly, with as little pain, and certainly with less danger than if the operation of tying the artery had been performed.

LIST OF SCIENTIFIC MEETINGS FOR THE WEEK.

This Evening,	June 5.	Royal Institution. *Subject:*—Prof. Faraday, "On Points Connected with the Non-Metallic Elements." Three o'Clock.
Monday,	June 7.	Royal Institution. *Subject:*—J. Conolly, M.D., "On Insanity." Four o'Clock.
——	——	Chemical Society. Eight o'Clock.
——	——	Epidemiological Society. — *Subjects:* —1. C. Finch, M.D., "On the History of the Introduction of Vaccination into India." 2. H. J. Stewart, Esq., Assistant-Surgeon Bombay Army, "On Vaccination in the Bombay Presidency." Half-past Eight o'Clock.
Tuesday,	June 8.	Royal Institution. *Subject:* — E. Lankester, M.D., "On the Physiology of Plants." Three o'Clock.
——	——	Royal Medical and Chirurgical Society. Half-past Eight o'Clock.
Wednesday,	June 9.	Royal Institution. *Subject:*—J. Conolly, M.D., "On Insanity." Four o'Clock.
Thursday,	June 10.	Royal Institution. *Subject:* — R. Westmacott, Esq., R.A., "On the History and Practice of Sculpture." Three o'Clock.
Friday,	June 12.	Royal Institution. — *Subject:* — Professor Faraday, "On the Physical Character of the Lines of Magnetic Force." Half-past Eight o'Clock.

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Medical Times & Gazette.

SATURDAY, JUNE 5.

THE BOARD OF HEALTH AND YELLOW FEVER.

We were among those who expected great results from the establishment of the Board of Health. The formation of the Board gave a public expression to views widely diffused, yet scarcely recognised by the nation at large; and it appeared likely to direct scattered, and therefore comparatively useless, efforts into one uniform and useful channel. That these expectations have not been realised is owing to deficiency in the machinery, and not to want of truth in the subject. The members of the Board of Health, after nearly four years of office, have not advanced Sanitary Reform one *iota;* but have, on the contrary, disconcerted ardent friends, created powerful enemies, and damped the enthusiasm of the public.

That these results are in part owing to the mental character of the men who work the Board of Health, we have little doubt; but they are, no doubt, in part, attributable to the original constitution of the Board. We have repeatedly contended, that such a Board should not only be entirely medical, but should include within itself, either as actors or advisers, the highest medical science of the time. We did not say this from any narrow professional feeling, but from a profound conviction of its truth. The course of events has verified our anticipations.

The last Report of the Board of Health cannot be accepted by the Profession. With many points of good about it, bearing evidence of much thought and labour, it is yet vitiated throughout by one grand error. It starts from a pre-arranged hypothesis; its conclusion forms its foundation; it is not an inquiry, but a thesis—not the calm summing up of a judge, but the one-sided pleading of a counsel. Resolutely determined to reject *in toto* the theory of contagion, and the possibility of importation, the Board *huddles* together all the evidence it can collect for its own view, and carefully leaves out of sight the witnesses who are waiting to be called, and who are to present the other aspect of the case.

Dr. M'William's re-statement of the case of the Eclair, and the fever introduced by her into Boa Vista, is, for the most part, a summary of the evidence contained in his well-known Report. The case may be said to be re-argued from its old premises, and the former conclusion is re-affirmed. Dr. M'William proves, that the Board of Health have omitted evidence when they pleased, and have misrepresented it when it did not tally with their case. The exposure damnifies altogether the character of their Report, and is the most serious blow the Board of Health have had to sustain.

With what name shall we characterise this disposition of the Board to overlook incontrovertible facts and to set aside inconvenient testimony? Is it dishonesty, or is it ignorance, or is it partisanship?

Clearly the latter. The Board of Health fancy that the progress of modern doctrine is to do away with the theory of contagion. They perceive the absurdities of the modern system of quarantine, founded upon obsolete notions and dogmas of the Middle Ages, and they desire to abolish it. Both opinions are equally erroneous. The progress of science will certainly define more clearly the notion of contagion, but it will not undermine it. The wants of society demand a modification of quarantine, but they do not necessitate its abolition. The great object of medical science in this direction, is to learn how most safely as well as most expeditiously intercourse between nations can be carried on. This object will never be accomplished by the assertion of crude views, the adherence to unstable doctrines, or the proposal of unsafe rules of intercourse. Medical science will expose the falsehood of the one, and the national common sense will detect the danger of the other.

To deny, with the case of the Eclair before them, that yellow fever is sometimes contagious, and that it can be imported, is

to commit an equal error with Dr. Whyte, who denied the contagion of plague; and to omit all precautions in yellow fever countries would be as suicidal an act, as the inoculation which proved fatal to that unfortunate individual. There may be some Medical men who would not agree in this opinion, and who, with Drs. Gilkrest and Burrell, will ride to death their hobby of non-contagion; but it is indeed unfortunate that the responsible advisers of the Government in matters of health should hold such opinions,—opinions which we must stigmatize as erroneous, and condemn as dangerous.

Turning from the general question to one feature of it, nothing has more dissatisfied us in the Report of the Board than the way in which the Board, and those who have communicated their opinions to them, speak of the labours of Dr. M'William.

For ourselves, we hold that Dr. M'William, by the care and impartiality with which he investigated the Boa Vista epidemic, has laid, for the first time, a sure foundation for a true judgment. No criticism, however one-sided or however subtle, can destroy the simple evidence he has recorded; and no injustice on the part of individuals can affect the reputation which an investigation so masterly and complete has earned for him. That he is able to support his own ground, his excellent papers in these columns sufficiently show. We can only hope, that he may be tempted to analyse the other portions of the "Report," and let us know at what value we are also to rate them.

DISTRIBUTION OF MEDICAL APPOINTMENTS IN THE EAST-INDIA COMPANY'S SERVICE.

Within the last few weeks three appointments have been made in the medical staff of the East India Company which have afforded us considerable gratification, as they show how strong the tendency is becoming towards a faithful and honest distribution of the patronage in the hands of that powerful Company. A fortnight since the Assistant-Surgeonship bestowed upon the Medical School of St. George's Hospital, by Sir Benjamin Brodie, was awarded to Mr. George Nayler, and about the same time similar appointments, given to the respective Schools of Guy's and King's College Hospitals, were awarded to Messrs. William Bateson and Francis Macnamara. In all these cases, a very rigorous examination was undergone by the respective candidates,—a more severe one, indeed, than they would perhaps have experienced at either the Hall or the College; and it cannot, therefore, be doubted, that those who succeeded in distancing their competitors are really able young men, thoroughly versed in their profession.

Whilst we congratulate those gentlemen who were successful in carrying off what we trust will prove a golden prize, and open up to them a career of usefulness in our great Eastern empire, we cannot help, at the same time, congratulating the Profession upon the system of competition for such appointments, as its manifest tendency is to send forth young men to our distant possessions of far higher qualifications than the old method of private favour or *furtive* purchase was likely to do. And it was really high time that such high qualifications were demanded of our young military surgeons; for it must be remembered, that the army is no longer what it was. The examination passed by ensigns is so stringent, that every officer must now possess a scientific education, and, in many cases, the Military Colleges turn out young soldiers whose attainments would entirely throw into the shade those of the old school of military surgeons. For the sake of our own laurels, therefore, we must insist upon the thorough education of those students who receive either naval or military appointments; unless we wish to see the medical officer the most ignorant man in the mess-room, the system of private appointments of under-educated young men must no longer obtain. For the sake of the comfort and honourable position of the medical man himself, so much might be urged; and, on the part of the soldiers under his care, it might be still further demanded, that only the highest medical labour should be employed. The soldier, unlike the civilian, has no right of appeal, if we may so term it, for what he might consider the improper treatment of his medical attendant; he must die as unflinchingly and as uncomplainingly under the pills of his medical man, as under the bullets of the enemy. The medical officer has, indeed, the power of life and death over a thousand men; the very existence of such an authority ought to force upon those who have the means of conferring it, the necessity of providing that it shall not be abused, by ignorance at least. What we have said with respect to students receiving the appointments of military Assistant-surgeons, applies with equal force to those destined to fill the like situations in the sister Service. If the Government neglect to treat her officers with that regard and respect due to gentlemen, the Medical Profession must not, on that account, neglect to fit themselves in every respect for a position in itself so honourable, and involving so much responsibility. We hear that the Duke of Northumberland, the First Lord of the Admiralty, has placed at the disposal of the Middlesex Hospital a great many of the Naval Assistant-Surgeonships in his gift; and we trust, that, in future, the private and promiscuous distribution of this kind of patronage will be entirely abandoned.

THE CANCER HOSPITAL.

We took occasion to advert, a short time since, to the recommendation of the Committee of the Common Council to grant Dr. Marsden's petition for a hundred guineas towards his Cancer Hospital. When the matter came on for discussion in the usual form, it was only the accident of but one Alderman being present that prevented the recommendation of the Committee from being agreed to; and we were informed that, at the next Court, the sum would be certainly voted. The next Court was held on Thursday, May 27, and the recommendation on that occasion, after some little discussion, was *negatived*. This was no more than we expected; we knew it was sufficient simply to explain that the Profession were totally opposed to any such grant, and that the establishment of the proposed Institution would act injuriously on the Medical Schools of the Metropolis, and the large hospitals at present in existence; such an explanation we knew would set the matter right, and stop, *in transitu*, what seemed a job. Dr. Marsden was surprised, no doubt, to find this time the Common Councilmen fully understood the question. It was distasteful enough to hear Mr. Elliot say, "He thought if a medical gentleman, who was already connected with a large establishment for the treatment of diseases, was possessed of a specific for the awful malady of cancer, it would not only be an act of humanity, but an act of policy in that practitioner to exercise his skill in that establishment, and to communicate the invaluable secret to all others. He did not believe that Dr. Marsden had a specific for the cure of cancer, or had greater power over cancer than the Corporation itself had."

Mr. Anderton again sent a shaft to the very heart of the

question when he said, that "it appeared to him that there was nothing to prevent the reception of cancer-patients in that hospital (the Royal Free), and that, while funds were actually wanted for the support of that Institution, it would be unwise to agree with the Committee in their Report. * * *He apprehended, that the encouragement of local and partial institutions would tend to the injury of science*, by checking the practice of those who were endeavouring to excel in the Profession." Dr. Clark, to whose amendment the Profession owe the refusal of the grant, and [to whom we return our sincere thanks for the able manner in which he fought the motion in the Council, said rightly, that, by supporting such an Institution, the Court "would offer the greatest possible insult to the Profession."

The unoccupied condition of the Royal Free Hospital, at the very moment when its founder is begging funds to establish another medical charity, has struck most people as extraordinary. By one of those unlucky accidents which do sometimes happen at unfortunate moments, only a few days since, the advertisements of the two institutions were to be found in the *Times*, one over the other. First came the Royal Free, with the simple statement, that the hospital was capable of holding 500 beds, whilst it had the means of maintaining only 135; the public were accordingly moved in piteous terms to contribute to the furnishing of the odd 365 beds. The very next appeal to the public was in favour of the building fund of the Free Cancer Hospital, which is to contain only 50 patients. Why, in the name of common sense, exclaims every one, does not Dr. Marsden turn the Free Cancer Hospital into a *ward* of the Royal Free Hospital, seeing that he has such ample room? What right has he to hold out a couple of hats to the public, when the money he has got is sufficient for all purposes? If the Royal Free is such a rickety progeny, would it not be much more honourable towards the charitable and advantageous to the Profession, to nourish and support it with the means in his power, rather than to cry for help to enable him to give life to a second, and, in all probability, a less sound child? We do not think that Dr. Marsden's mind is thoroughly closed to conviction, and we put this question to him in a friendly spirit; indeed, we know that he is amenable to reason, for he has condescended to profit by our advice respecting the advertisements of the Cancer Hospital, to be seen from day to day in the *Times*. Really, it is astonishing to see the rapidity with which our strictures acted as a remedy in this case. We can only liken it to that striking pictorial Advertisement, in which, in one department, a poor wretch is drawn suffering from excruciating agonies in the tooth, and, in the other, is all happiness and joy, dancing about, and crying, "Ah! Ah! Cured in a moment!" or to the instantaneous effect of the operation for strabismus; or to the miraculous results arising from the simple cutting of a tendon in club-foot. In the first Advertisement, the reader will perceive certain statements (*italicised*) which give a painful aspect to it, and which we took occasion to comment on in a late article, (May 15).

Here it is, as before treatment:—

"FREE CANCER HOSPITAL, 1, Cannon-row, Parliament-street, London.

President.—The Right Hon. the Earl of Airlie.
Treasurer.—John Parkinson, Esq., 66, Lincoln's-inn-Fields.
Bankers.—Messrs. Coutts and Co., Strand.

This Institution has now been in existence twelve months, during which period a larger number of patients suffering under this dreadful malady has been brought together than at any other period, clearly showing the necessity there is for an Institution exclusively devoted to the treatment of *this hitherto-considered incurable disease*. Although many deaths have occurred out of the 206 cases which, up to the present time, have been under treatment, it is highly gratifying to report, that a large number have been greatly alleviated, and *several incipient cases discharged completely cured*," etc.

As after treatment:—

"FREE CANCER HOSPITAL,
1, Cannon-row, Parliament-street, London.
President.—The Right Hon. the Earl of Airlie.
Patronesses.

The Rt. Hon. the Marchioness of Downshire.	The Rt. Hon. the Dowager Lady Kinloch.
The Rt. Hon. the Dowager Countess of Carnwarth.	The Hon. Lady Eliz. Moore.
The Rt. Hon. the Countess of Cottenham.	The Lady Louisa Cator.
The Rt. Hon. the Countess of Roseberry.	The Lady Jane Charteris.
The Rt. Hon. the Viscountess Combermere.	The Lady Dalmeny.
The Rt. Hon. the Dowager Lady Grey.	Lady Gipps.
The Hon. Lady Pepys.	Lady Morgan.
	Lady Nightingale.
	Lady Mary Singleton.
	Lady Palmer Ackland.
	Miss Burdett Coutts.

Treasurer.—John Parkinson, Esq., 66, Lincoln's-inn-fields.
Bankers.—Messrs. Coutts and Co., Strand.

This Institution has now been opened fourteen months, during which period a large number of patients from all the Metropolitan parishes, and from distant parts of the country, have been received. Although some deaths have occurred out of the 210 cases which, up to the present time, have been under treatment, *it is highly gratifying to report, that in several instances such relief has been afforded that many patients have been restored to their homes, and enabled to return to their usual occupations," etc. etc. etc.*

Really, the change from one to the other is quite pleasant. In his *second manner*, it will be seen, he begins by "join hands and down the middle" of the double row of noble Lady Patronesses of the Institution;—not a word now about this "hitherto-considered incurable disease," which conveyed the idea, that he had discovered its specific; not a word about "incipient cases discharged completely cured;" but we get instead, the strictly modest statement,—with which we find no fault,—that, "in several instances, such relief has been afforded, that many patients have been restored to their homes, and enabled to return to their usual occupations."

Of course, the innocent complicity of the Lady Patronesses in Dr. Marsden's scheme we can only lament. They know not what they do; we trust, however, that they are as amenable to a plain statement of facts as the Common Councilmen proved to be. After having pulled out such an ample stone as the 100 guinea grant for this Institution,—an Institution which it is so necessary to level for the good of Medical Science, and "*pour encourager les autres*" of a similar injurious tendency,—we have more room to introduce our hands, and, with the aid of the Profession, we doubt not that we shall in time bring the whole superstructure, *as at present based*, to the ground.

THE APOTHECARIES' LICENCE.

We understand, that it is the intention of the Court of Examiners of the Society of Apothecaries to make such modifications in their examination as will remove the difficulties now felt by gentlemen who are rather advanced in years, and who may wish to procure the licence of that court. We believe that surgeons in the Army or Navy, graduates of any British University, and members of the College of Surgeons who have attained the age of forty, and can produce evidence of a regular medical education, will be subjected to an examination on practical points chiefly, and will not be required to read Gregory and Celsus, or to possess the

knowledge of chemical minutiæ which is—wisely or unwisely we will not now consider—exacted from younger students. We think that this is a fair concession to the circumstances of many gentlemen who desire to settle as general practitioners, but who did not think it necessary to go up to the Hall in the earlier part of their career.

BITTER BEER.

We publish to-day a letter from Baron Liebig to Mr. Allsopp on the subject of the adulteration of Bitter Beer. It was owing chiefly to our instrumentality, that the extraordinary assertions of the French chemists were brought prominently before the British public; and we have, therefore, extreme pleasure in publishing the conclusive and satisfactory letter of the most illustrious chemist of the day. The investigations which have been undertaken by Messrs. Graham and Hofmann, and by Baron Liebig, are amply sufficient to reassure the public, and to prove that M. Payen, whatever may have been his grounds for the statement he made, was in total error. That either Mr. Allsopp's or Mr. Bass's beer is adulterated, we hold to be impossible. Moreover, although there is no direct evidence on the point, the reasons against the supposition that any kind of beer is adulterated with strychnine appear to be conclusive.

We cannot quit the subject without expressing our great satisfaction at the open and honest course adopted by Mr. Allsopp. We foresaw that the only way to avert the suspicions which the French statement excited, would be a full and complete investigation. In justice to Mr. Allsopp, we must state, that he has made this inquiry as strict and searching as possible, and has succeeded triumphantly in justifying himself and the important trade of which he is one of the principal members.

BYE-LAWS OF THE ROYAL COLLEGE OF SURGEONS.

The following Bye-laws of the Royal College of Surgeons, relating to the election and admission of members of Council, received the sanction of the Secretary of State for the Home Department on Tuesday last:—

1. The place and time appointed for every meeting of the Fellows for the election of members or a member of the Council shall be announced in the *London Gazette*, and in two London daily newspapers, not less than thirty days and not more than forty before the day of meeting.

2. Every Fellow desirous of a seat in the Council shall, within ten days from the publication of the *London Gazette* in which the day of meeting for the election shall be announced, transmit to or deliver to the Secretary of the College or person acting for him, a notice and declaration signed by himself in the following terms:—

I, A B, of C, Fellow of the Royal College of Surgeons of England, do hereby declare, that I am a candidate for a seat in the Council of the said College; that I am in the *bonâ fide* practice of the profession of a surgeon, and that I do not practise as an apothecary.

Together with a nomination signed by six Fellows of the College in the following terms, viz.:—

We, the undersigned Fellows of the Royal College of Surgeons of England, do hereby certify, that A B, of C, is in our estimation a fit and proper person to be a member of the Council of the said College; and we do hereby nominate him a candidate for a seat in the said Council.

And also a certificate signed by three Fellows, in the following terms, viz.,—

We, the undersigned Fellows of the Royal College of Surgeons of England, do hereby certify, on our own personal knowledge, that A B, of C, is in the *bonâ fide* practice of the Profession of a surgeon, and that he does not practise as an apothecary.

3. The names of the eligible Fellows (who shall have been nominated as candidates for the Council in the manner required, and who shall have complied with the provisions and conditions respecting the said notice and declaration, nomination and certificate,) together with the names of the six Fellows by whom they shall respectively have been nominated, shall be published in the *London Gazette* and in two London daily newspapers not less than ten days before the day appointed for the election.

4. Members of the Council retiring from office by rotation and desirous of re-election, shall intimate such their desire in writing, addressed to the Secretary or person acting for him, within ten days from the publication of the *London Gazette* in which the day of meeting for the election shall be announced; and the names of such members shall be published in the *London Gazette* and in two London daily newspapers, at the head of the list of the names of the several other candidates to be published as aforesaid.

5. At every meeting for election into the Council, not less than fifteen Fellows being present, the Chairman having declared the business of the day, the Secretary or person acting for him shall proceed to announce to the meeting the names of the several candidates so published as aforesaid, in the order in which such names were so published, except the names of such of the said candidates as shall previously have signified to the Secretary, in writing, his or their desire not to proceed to the election, whereupon a ballot shall be forthwith taken for the election of such number of members as shall be required to fill up the vacancies in the Council; and such ballot shall be kept open for three hours, unless for the space of ten minutes after notice from the Chairman of his intention to close such ballot, no Fellow shall actually ballot, in which case the Chairman shall declare such ballot to be closed; and at the expiration of such three hours, or on such previous closing of the ballot, as the case may be, the balloting-box shall be opened by the Chairman, who shall ascertain the result of such ballot, and shall forthwith declare the names of the Fellows elected into such vacancies, and thereupon the election of such Fellows to be Members of the Council shall be deemed complete. But if, after the result of such ballot shall have been so ascertained, and the names of the Fellows elected shall have been declared, it shall appear that the number of Fellows shall, from any cause, not be sufficient to fill up all the vacancies, the proceedings of the meeting shall be continued, and the ballot taken again, until all the said vacancies shall have been filled up by the election of sufficient Fellows for that purpose.

6. When there shall be any vacancy in the Council by the death or resignation of an elective member, the Fellow of those elected who shall have been so elected by the smallest number of votes shall be the substitute-member of Council in the room of such elective member; and when more than one such vacancy shall be required to be so filled up, the Fellow elected by the smallest number of votes shall be the substitute in the room of that member whose period of office would have first terminated, and so in regard to each of such vacancies respectively. And if it shall at any time happen that more than one member shall be elected by the same number of votes, being with reference to the other Fellows elected the smallest number of votes, the youngest in standing as a Fellow of the persons so elected by such equal number of votes shall be the substitute member; and so in regard to each of such vacancies respectively.

7. Every member of the Council shall, prior to his admission, subscribe his name to a copy of the bye-laws, in testimony of having engaged himself to the observance thereof; and upon his neglect or refusal so to do his election shall be void.

8. Every member of the Council shall, prior to his admission, pay twenty guineas; but which sum shall be paid on his first admission only.

REVIEWS.

On Diseases of the Liver. By George Budd, M.D., F.R.S.; Professor of Medicine in King's College, London, and Fellow of Caius College, Cambridge. Second Edition. 8vo. Pp. 486. London: Churchill. 1852.

The Medical Press of this country has never, perhaps, been more prolific than during the last quarter of a century; and though, among its numerous productions, we often find much to condemn, still we cannot but be sensible, that, notwithstanding the numerous temptations to acquire shallow and glittering rather than profound knowledge,—notwithstanding the disheartening encouragement so freely bestowed upon every quack and knave of the hour,—notwithstanding the patronage conferred upon every absurdity,—notwithstanding these drawbacks, and in spite of the anxieties and hardships of the honest medical man's career,—we still receive contributions to our literature, proving, that in our ranks are to be found many whose main desire is to mitigate

the pains and sufferings of our afflicted fellow-creatures, and to establish our daily practice on the firm foundation of scientific truth.

Dr. George Budd is known as a scholar, an accomplished physician, and an assiduous and successful teacher. In 1845 he published his work on Diseases of the Liver; and his reputation is now increased by the appearance of a second edition, in which our knowledge of the physiology and pathology of this gland is brought up to the requirements of the present day. Few diseases, as a class, stood more in need of investigation than those on which Dr. Budd has thrown the light of his experience; and we cannot but feel grateful to him for the use he has made of his former position as Physician to the Seamen's Hospital-ship, the Dreadnought, where he enjoyed opportunities for investigating the nature of diseases of the liver which rarely fall to the lot of practitioners in this country. At the same time, we must remember, that many of the difficulties which stood in the way of earlier observers had been removed by the publication, in the "Transactions of the Royal Society," of Mr. Kiernan's admirable papers on the anatomy and physiology of this organ, as well as by the subsequent researches of Bowman, Henle, and others.

The first edition of Dr. Budd's work is too well known to require comment or criticism from us; we shall, therefore, confine our observations to the new matter now brought before us, commencing by a few remarks on the state and relations of the organic constituents of bile,—to which the attention of chemists has, for the last few years, been actively directed. To make a perfect analysis of bile is a matter requiring great care and labour, and few complete analyses have been performed of human bile owing to the difficulty of procuring it in a proper form and in sufficient quantity; in the gall-bladder, also, the bile loses by absorption some of its more watery parts, and is further modified by the addition of the proper secretion of that cavity.

Fresh, healthy human bile, when taken from the gall-bladder, is found to be of a greenish-yellow colour, possessing a scarcely perceptible faint odour, a nauseous bitter taste, with a sweetish after-flavour, and a more or less viscid, unctuous feel, with many physicial properties in common with soap. It is heavier than water, that from the gall-bladder of the ox having a specific gravity between 1·026 and 1·030; it is often of an alkaline re-action, but if perfectly fresh is neutral. As it is found in the hepatic ducts it is less viscid, less bitter, and of a golden-yellow colour; and in such specimens Dr. Budd has never found plates of cholesterine, whereas in cystic bile they are numerous, being there formed by precipitation, or being derived from the coats of the gall-bladder itself. The analysis of this fluid generally referred to, and quoted by Dr. Budd, is that made by Berzelius of the cystic bile of the ox, which consists of

Water	90·44
Biliary matter, with fat	8·00
Mucus of the gall-bladder	0·30
Osmazome, chloride of sodium, and lactate of soda	0·74
Soda	0·41
Phosphate of soda, phosphate of lime, and traces of a substance insoluble in alcohol	0·11
	100·00

In subsequent researches, Berzelius separated from his biliary matter a green and a yellow colouring matter, a small quantity of fat and fatty acids, and a peculiar substance, which he termed biline, and which he regarded as the chief constituent of bile. This latter substance has since been found to consist chiefly of cholcic acid; and, in 1838, the opinion was promulgated by M. Demarçay, that the essential principles of bile consist of this resinous acid combined with soda, forming a substance analogous to soap. He consequently considered it to consist of little more than cholcate of soda.

Previous to these researches the biliary secretion was regarded as a much more complex fluid; and this appears to have been due to the fact, that the organic substance in combination with the soda is very readily decomposed:—

"It was found by Mulder," says Dr. Budd, "that when ox-bile undergoes decomposition spontaneously, or by the prolonged action of hydrochloric acid, it is resolved (with the exception of the fats, colouring matters, and salts,) almost entirely into three products—taurine, ammonia, and a substance which forms various acids, differing from each other merely in containing different proportions of the elements of water. All these acids pass into a well characterised acid, choloidic acid, (Demarçay), and as the ultimate product of decomposition into dyslysine."—P. 29.

After making a few remarks upon the ultimate composition of these substances, Dr. Budd continues:—

"Some researches on ox-bile, recently made by Dr. Strecker in the laboratory of Liebig, have given us more insight into its constitution. They have shown that the biliary matter which is combined with the soda (the cholcic acid of Demarçay) may be resolved into two acids, both containing nitrogen, and one of them containing sulphur.

"The acid that is free from sulphur (C_{52} H_{43} NO_{12}) may be further resolved into glycocol, the sugar of gelatine (C_4 H_5 NO_4), and an acid, which contains no nitrogen, to which Dr. Strecker has given the name, *Cholalic Acid*. This acid, which is the *cholic acid* of Demarçay (C_{48} H_{40} O_{10}), when boiled with strong hydrochloric acid, or when exposed to a high temperature, is converted, by the loss of part of its water, into choloidic acid, and ultimately, by a still further loss of water, into dyslysine.

The sulphuretted acid of ox-bile (C_{52} H_{45} NO_{14} S_2) may, in manner, be resolved into cholalic acid and taurine. It has, therefore, a similar constitution to its fellow acid, with taurine in the place of glycocol. When acted on by strong acids it yields taurine, choloidic acid, and dyslysine.

"If we use the simpler term, *cholic acid*, to express the cholalic acid of Strecker, the two acids above mentioned, of which glycocol and taurine are respectively the adjuncts, may therefore be termed, *glyco-cholic* and *tauro-cholic* acid. Tauro-cholic acid contains 6 per cent. of sulphur. Now, as the dried and purified bile of the ox contains only 3 per cent. of sulphur, it follows that, in ox-bile, glyco-cholic and tauro-cholic acids exist in nearly equal proportions. Dr. Strecker has further shown, that tauro-cholic acid and its compound with soda dissolves cholesterine very readily; while glyco-cholic acid has very little solvent action upon it. He has thus rendered it probable, that tauro-cholic acid is the chief solvent of the cholesterine of the bile."—P. 31.

A full account of the researches of Strecker will be found in Lehmann's work on Animal Chemistry, a translation of which is in progress of publication by the Cavendish Society.

As before remarked, few perfect analyses have been made of human bile; there appears, however, every reason to believe, that it resembles ox-bile in its physical qualities, and that on decomposition it yields the same products. The green colouring-matter of ox-bile has been shown by Berzelius to be identical with chlorophyl, the green colouring-matter of plants; and there is every reason to believe, that the brown bile-pigment of other animals is also a modification of this substance. As Dr. Budd well remarks:—

"The successive shades of blue, green, and yellow, which are seen in a bruise-mark on the skin, and which are so like the tints of the bile, long ago suggested the hypothesis, that the colouring matters of bile are derived immediately from the red colouring matter of the blood. Late researches tend to confirm this hypothesis, and thus render it probable that the peculiar colours of bile, urine, and blood, result from different modifications of the same pigment."—P. 34.

Many other important points are discussed in the introductory chapter, especially in reference to the facts, that the proper principles of bile are in great part derived, like those of the urine, from the waste of the tissues; and that the liver by its secretion purifies the blood, separating from it those noxious and effete matters which result from this waste. The debatable ground, as to whether the peculiar principles of the bile are formed in the liver, or whether they exist ready made in the blood, and are merely separated by this gland from it, is also entered upon, although no satisfactory data are given for the complete solution of so difficult a question. The chapter is closed by a discussion on the uses of the bile, followed by some practical remarks on the treatment to be adopted in those cases where, from different causes, the liver becomes inadequate to its office, a more abundant secretion of bile being requisite to purify the blood:—

"In the management of such cases we have two objects to fulfil; first, to enjoin those conditions and rules of life, that render a plentiful secretion of bile less needful; and, secondly, to endeavour to render the liver itself more active.

"The chief conditions to diminish the quantity of matter which the liver is called on to excrete, are, a light diet, with water for drink, active exercise, early rising, and a cool or temperate climate. Acids have been supposed to act in the same way, and

have been much in repute as a remedy in liver disorders, particularly in India, where, from the circumstances mentioned, a remedy having this mode of action is especially required.

"Various medicines seem to fulfil to a certain extent the second object, that of rendering the liver more active, and increasing in this way the secretion of bile. Mercury, iodine, the salts of soda, muriate of ammonia, and taraxacum, have undoubtedly an action of this kind. The first and last of these medicines, especially, have long been in this country the chief resources of the physician in the treatment of chronic hepatic disorders. The marked temporary benefit often resulting from mercury given for this effect has, from the difficulty of distinguishing the various diseases of the liver, and the consequent indiscriminate use of the drug, led to great evils. This medicine was at one time, by English practitioners, given almost indiscriminately, and long persevered in, for disorders of digestion, many of which did not depend on fault of the liver at all, but on local disease of the stomach or intestines, or on faulty assimilation, the result of debility, which the prolonged use of the mercury but too often increased."—P. 51.

The limits within which it is necessary to confine this review, prevent our following Dr. Budd through the successive divisions of his work with that minuteness which we could desire. We must, therefore, pass by the chapters on Congestion of the Liver, on the Inflammatory Diseases of this organ, on the Diseases which result from its Faulty Nutrition or Faulty Secretion, and on its Cancerous Diseases, in order to notice briefly the section devoted to the consideration of Hydatid Tumours, which, like cancerous growths, are more common in the liver than in any other organ, but the nature of which we do not think is as clearly understood. These tumours in the liver consist of a sac of variable thickness, formed of condensed hepatic tissue, with the remains of obliterated vessels, and lined by a thin membranous bladder or cyst, containing a colourless, limpid fluid, in which are generally found floating a variable number of similar globular bladders, of sizes varying from a pea to a walnut, or even larger. To these bladders, Laënnec gave the name Acephalocyst—a bladder without a head (ἀκεφαλὴ κύστις). The acephalocyst, lining, but not adherent to the sac, is composed of finely laminated, friable coats, about the firmness of coagulated albumen: its layers can only be distinguished by the microscope. Sometimes (almost always in the lower animals,) this cyst contains no floating hydatids, or only a very few; in other cases it is literally crammed with them; and these, again, it is said, may contain another generation. To distinguish these different kinds, as well as to mark the mode of their increase, naturalists have divided these productions into two species: 1st, the *acepholocystis endogena* of Kuhn, likewise called *socialis, vel prolifera*, by Cruveilhier; the "pill-box hydatid" of Hunter, which is the kind most commonly developed in the human subject, and in which the fissiparous process takes place usually from the internal surface of the parent cyst, the progeny being sometimes successively included; and, 2ndly, the *acephalocystis exogena* of Kuhn, *eremita vel sterilis* of Cruveilhier, which developes its progeny generally from the external surface, and is found in the ox, and other domestic animals.

In reply to the question, What is the nature of hydatid tumours, and how do they originate? Dr. Budd remarks:—

"By some, acephalocysts were supposed to be true parasites, having independent vitality, and propagated by germs introduced from without. By others, they were supposed to result from depraved nutrition of one of the normal constituents of the body. A few years ago, this latter opinion was expressed in more definite terms by the most eminent of our anatomists,(a) who imagined them to result simply from unnatural development of the nucleated cells, which perform such an important part in the nutrition and growth of all organised bodies. The question seems at length in the way of being settled by the interesting discovery to which attention has lately been recalled by a French physician, M. Livois, that acephalocysts are the dwelling place of those microscopic animalcules to which Rudolphi gave the name *echinococcus*, from the cylinder of hooks which surrounds the head. It has long been known that echinococci occasionally exist in countless numbers in acephalocysts; but such instances have been regarded as exceptional, and the echinococci have been regarded as parasites of the hydatids. The researches of M. Livois, however, have led him to the conclusion, that these animalcules exist in all acephalocysts.

He states, that among more than eight hundred hydatids from man and other animals, he did not meet with a single one without them."—P. 417.

Dr. Budd confirms these observations, which we can also do from some researches on a smaller scale. At the same time, we believe these views are not universally entertained by anatomists. The effects, symptoms, diagnosis, and treatment of these tumours, are then fully described; and the work concluded by a chapter on Jaundice, which, though only a symptom of disease, (*i.e.*, of some impediment to the flow of bile into the duodenum, and the consequent absorption of the retained bile, or of defective secretion on the part of the liver, so that the principles of the bile are not separated from the blood,) is, nevertheless, such an important and frequent symptom, that it well merits separate consideration, and forms, as it were, a useful summary of the whole work.

From the foregoing remarks, our readers will perceive the high value which we set on Dr. Budd's work; we will only, in conclusion, add a word of praise to Dr. Beale, for some excellent chemical analyses performed by him for the author; to Dr. Westmacott, for some graphic illustrations; and to the publisher, for the beautiful way in which the work is "got up."

(a) Owen's Lectures on the Comparative Anatomy and Physiology of the Invertebrate Animals, p. 44.

GENERAL CORRESPONDENCE.

EVIDENCE OF DR. M'WILLIAM ON THE YELLOW FEVER IN THE ECLAIR AT BOA VISTA.

[To the Editor of the Medical Times and Gazette.]

Sir,—That part of the Second Report on Quarantine by the General Board of Health which refers to the alleged importation of yellow fever into Boa Vista in 1845 has, it appears, given much umbrage to Dr. M'William, the promulgator of this story of contagion.

The doctor had imagined this matter had long since been at an end, (though, on the presentation of his Report on the case, his medical chief, who probably took the trouble to examine the value of his so-called facts, condemned his conclusions,) because *three* reviewers, representing in this instance "the united voice of the Medical Press, with one exception," in Great Britain and America, confirmed, as he considers, the justice of those conclusions.

One feels inclined to ask, whether Dr. M'William ever heard of the manner in which, of necessity, from his manifold engagements, a reviewer reads a book; and, further, whether he ever felt the force of the expression, "silent contempt."

If I remember aright, Sir, it was once observed by the immortal Cherviu, that, if you believed the statements of M. Pariset to be true, you must be a contagionist; but, when you became aware that the statements of the latter gentleman were altogether false, you would become of a totally different opinion on the question at issue. So, in the present instance, I take it, that, while these representatives of "the united voice of the Medical Press" believed that the conclusions of Dr. M'William were founded on evidence, they could not avoid believing, also, that such conclusions were sound; but I submit that it becomes a different matter when the careful analysis given by Dr. Browne in the Appendix to the Report of the Board of Health, proves beyond all question, that there is nothing furnished by Dr. M'William which any Court of Judicature, or any man of common sense, would accept as evidence at all. It literally is not worth a rush; for the leading witnesses contradict each other, while they are chiefly selected from an interested class of low Portuguese, never celebrated for a regard for truth.

After reducing "the united voice of the Medical Press" to four for want of space,—not being able to find room even for reference to the others,—Dr. M'William amuses us with a reprint of the opinions of a Board of Officers assembled at the office of the Army Medical Department, 1849-50; and also with an opinion from a Committee of the College of Physicians: but, as no examination made by either of these bodies of the papers relative to the Eclair is given, we have no means of knowing that they did not each also take for granted that the stories collected by Dr. M'William were worthy of the name of evidence.

We are not informed whether any examination of medical men conversant with the disease was made by the latter body; nor the grounds on which a majority of the former gentlemen delivered opinions directly at variance with the greater part of the medical evidence taken by themselves; nor whether *their* Director-General entertained any decided views on the subject. If he did, the perusal of pp. 130-31 of the "Second Report on Quarantine" will materially modify our opinion as to the value of an inquiry from

that source; especially when it is observed, that no medical officer of the first rank, of which there must be many unemployed, was upon the Board. The members were all subordinate officers, eligible for promotion on the favourable recommendation of their superior; or liable to service in a tropical climate, did he imagine their experience on the subject insufficient.

Without questioning the competency of other bodies, the nation must be much indebted to the gentlemen who have undertaken the labour of sifting such a mass of contradictory rubbish as the examinations on which Dr. M'William's conclusions were founded.

I need hardly say, that the time has passed when the public is to be called on to bow before the dictum of any College, Board, or Review whatever, on a question of so much importance to international intercourse as Quarantine. It has been too much the practice to settle such matters by simple authority; and, if the whole voice of the Medical Profession were agreed, the public would nevertheless demand reasons, and very efficient reasons, for the conclusions at which they had arrived.

Dr. M'William, in his "Observations," unnecessarily confuses the subject, by prominently introducing the question of contagion. But the present question is, not whether the fever of the Eclair was contagious, but simply whether it was imported into Boa Vista. After having read the evidence adduced, not in the light of any theory of contagion or the contrary, I must confess to be one of those who consider that Dr. M'William has failed to prove his allegations. I have read his official reports, and, on such loose statements, people could launch any theory. If there be any considerable number of medical men who are convinced by such statements, the worse for the character of the Profession, and the more need for including the study of logic in the curriculum.

Dr. M'William ought to be well aware, that the introduction of names to back opinions is of no use. It only proves what the parties thought, not what was true. I could overwhelm him with names. Has he, then, in his Official Report, made out his case? I at once say, No! Even in his "Observations," (*Medical Times and Gazette*, p. 542,) he admits what is tantamount to a giving up of the whole question. Probabilities may be very well in discussing scientific questions, but they cannot be admitted as weighing against the evils and cost of Quarantine.

The best way to decide these cases would be, to bring all the witnesses, medical or otherwise, before a legal tribunal, to sift the facts, and reject the opinions. This constitutes the value of the Report of the General Board of Health. It is not a medical Report, but simply an examination as to the credibility of testimony.

Dr. M'William now adduces new matter as evidence. That is, matter not official, which cannot be admitted into court.

If the Board of Health had done nothing more than call in question the complacent conclusions of bad observers, it would merit eternal gratitude from the Medical Profession as well as from the public.

The error committed by Government in the Eclair question was in not sending out two or three clever barristers to ascertain questions of fact. They would have disposed of Dr. M'William's 1600 replies in a very summary fashion. Even the Doctor's new version and evidence in these "Observations" is fatal to the whole inquiry.

As to the fever at Porto Praya, there is difference of opinion admitted, and the Board of Health were quite justified, considering Dr. Stewart's high position, in preferring his testimony to the bad evidence of Dr. M'William.

It is perfect burlesque to talk of the "clear and satisfactory adjustment" of points which our complainant settles at once on the authority of his own assertions, backed by his friend John Jamieson, (a convenient witness, by the way, and most conveniently at hand,) against any amount of respectable evidence which can be adduced.

For myself, I confess that I am unable to discover at what the good Doctor is driving. Does he wish to prove that the disease at Boa Vista was a disease *sui generis*, or not? If an exaltation of the endemic remittent, as he affirms, of what possible value are his puerile contradictions of its existence at the same time at Porto Praya? If he is right on this point, the College of Physicians, Sir William Burnett, some, at least, of the army medical officers, Dr. King, Captain Simpson, and a host of others, besides the Board of Health, agree with him. But, if it was a disease *sui generis*, Dr. M'William must resign the glory of the discovery to the disciples of the now illustrious Chisholm, and Dr. Nunes.(a) For the Chisholm school have always contended that the endemic remittent is not contagious.

By the way, it were well that we should be informed whether Dr. M'William considers small-pox may be non-contagious at one place, contagious at another, and again non-contagious at a third; or prevail only during the usual endemic season, as in the case of the Eclair fever at Boa Vista?

Mr. M'Clure's case falls under the same class as those of the guards at the fort. Moreover, the Growler herself had fever on board, and two cases from her actually died in the Woolwich Infirmary.

As to the overcrowding at the Fort, Sir William Burnett has already, as quoted in the Report on Quarantine, expressed an opinion, that it was capable in itself, at least when coupled with the intoxication and high temperature, of producing a fever of the worst kind, in which black vomit and yellowness of skin would be prominent symptoms. Did Dr. M'William really never hear of the "Black Hole" at Calcutta?

I need hardly tell the readers of the *Medical Times and Gazette*, that the influence of sanitary conditions on the propagation of epidemics is now known in this country, far beyond the limits of the Medical Profession; and it behoves all medical men writing on such subjects to be fully acquainted with them. So long as the hypothesis of contagion is used as a kind of "*pons asinorum*," to get over the difficulties of a more searching inquiry, so long will false opinions be afloat, and commerce have to pay their cost.

But as to the fever at Porto Praya, and the epidemy among the cattle,—can it be imagined that the bare assertions of an officer, without any evidence beyond inquiries among the class of persons on whom Dr. M'William appears, according to his own confession, to have relied, will be deemed sufficient to overbalance the testimony of his superiors in age, rank, medical and official experience? Or that an "intelligent and keen observer," a civilian residing at St. Nicholas, will outweigh the recorded observations of a naval commander, reported soon after his arrival from the scene in question, which happened at Porto Praya in 1845? Or that the veracity of John Jamieson(a) is to disturb the balance when weighed against the evidence of Dr. King?(b)

In the second portion of his "Observations," Dr. M'William lays great stress on the unfairness of supposing, that, if the Eclair fever was contagious, fomites must have been capable of introducing it into Boa Vista. But, in his alleged case of importation into Bahia in 1849, (see *Medical Times*, 19th April, 1851, p. 424,) the whole story *originally* rested on the supposed introduction by fomites from the captain of a ship,—having then, at least, no cases on board,—who had been about a month in the town before the appearance of the first case, and was himself never affected. And I mention this to show the utter impossibility of fixing this careful, laborious, and distinguished observer, to any one point. For, in 1851, as in 1852, show him the untenable nature of any particular piece of evidence, and, "presto, change!" he immediately produces a different version.(c) The disease is exalted endemial remittent, yet was never seen at Boa Vista before; at Brazil, it may be communicated from the jacket of a healthy sailor, but the inhabitants must be actually sick to convey it from Boa Vista; and the foul linen of the "Hankey" and the "Dygden," which so long befriended the contagionists of former days, is thrown overboard in more ways than one(d) by the skilful examiner of the "Eclair."

(a) The estimate of the value of Dr. Almeida's opinion would appear to be from the pen of Dr. Gillkrest, not Dr. King.

(a) The credibility of this immaculate witness is illustrated by the following story, related to me some weeks since by Dr. King:—

In the year 1846, reports reached the Admiralty of a second severe outbreak of fever at Boa Vista, and Dr. King was despatched to the relief of the distressed inhabitants. On the passage out, the Sphynx, in which he sailed, touched at Madeira, where the reports concerning Boa Vista were confirmed. Again, at St. Nicholas, Captain Cragg was assured, that the fever was raging on the island of Boa Vista to a frightful extent. Arrived at the harbour of Porto Sal Rey, a boat put off from the shore, containing this very John Jamieson, who, on being questioned by the captain and Dr. King, declared, that the people in the town and on the island were dying off in great numbers. Dr. King at once left the ship, and, on arriving at the port, found—what does the reader think, who relies on the veracity of John Jamieson?—*two* cases of fever, one of which was rheumatic, in the whole town! And the Doctor subsequently found, during his stay of upwards of a month, 14 or 15 slight cases within the circumference of the island.

(b) The epidemy among the cattle is very happily disposed of by Dr. M'William and his friend Jamieson; but, as the same causes exist every year, it may be well to inquire whether the epidemy be of annual recurrence? On his opposite tack, the Doctor appears to *doubt* any great mortality, because he did not observe (and "no place could escape *me*") the cattle lying dead; but, as dead animals are usually buried, or cast into holes,—without the nose of a carrion crow, they might escape even the most diligent of doctors.

(c) "*Since this paper was written*," (and since the discussion at the Epidemiological Society also.) "I have heard from Dr. Paterson's brother, (etc.,) now in this country," (our Doctor is never without a witness at hand,) "that the case of the Brazilian boy, though his brother's first case, was not the first case in the town"—*Medical Times*, p. 424 (1851).

(d) "So that in none of these cases" (the washerwomen) "can the occurrence of fever be fairly attributed to infectious matter conveyed by the linen."—Dr. M'William's "Report," p. 82.

"*I have since ascertained*," (indefatigable inquirer!) "that the gunner's

Nobody finds fault with the generosity of Great Britain in relieving the necessities of a poor Portugnese settlement; but they do complain of alms, whether needed or not, being obtained under false pretences.

Nobody doubts that Dr. M'William made excellent use of his "very useful and willing assistant," John Jamieson; or that both these philanthropists worked very hard to obtain the end they finally gained.

It would be a perfect waste of time to handy further about evidence, for Dr. M'William evidently does not understand the meaning of the term. The fact of his witnesses contradicting each other does not detract from the value of their testimony one jot in the Doctor's estimation, who considers such discrepancies very natural and highly satisfactory; indeed, they would appear to make the conclusions more valuable. In very truth, here is a Daniel come to judgment!

Then, again, the evidence seems much enhanced by resting on the foundation of the Doctor's 1600 questions,—and, with some exceptions, his 1600 answers; for, let it be remembered, the queries were for the most part put to illiterate Portugnese, whereas the replies appear in the very best of the Queen's English, on the interpretation of Dr. M'William and his friend, who are thus self-constituted counsel, witnesses, judges, and reporters. But it has been well observed by Mr. Howell, that the value of evidence depends on the credibility, not the extent, of the testimony.

Nobody has denied the comparative healthiness of Boa Vista immediately before the arrival of the Eclair. It is equally undeniable, that local causes existed on the island sufficient to have produced fever(a) had the Eclair never touched there.

With reference to the vessel herself, after all the egotistical lucubrations of Dr. M'William, there remain—

1. The boating at Sherboro.
2. The rainy season and drunkenness at Sierra Leone.
3. The green wood taken on board for fuel.
4. The thermometer at 86°.
5. The putrid mud under the boilers.
6. The overcrowding and increased drunkenness at the Fort.
7. And the final sacrifice of seven lives to the quarantine regulations of Great Britain.

While, as to the inquiry, there remains the fact, that not only Sir William Burnett, but Dr. King, who examined the circumstances at Boa Vista, and reported officially upon them, and who is, to say the least, as able an officer as Dr. M'William, arrived at the conviction, that Dr. M'William was wrong in all his conclusions.

I am, &c. THOM. BAKER.

St. John's-road, Fulham.

[After our article on the Report of the Board of Health was in type, we received Mr. Baker's letter. It has not induced us to alter a single word of what we had previously written; but it has still further excited our disgust at the manner in which the Board of Health are attempting to set aside the most important evidence that has ever been adduced in support of the contagion of yellow fever. We shall not enter, at present, into the argumentative merits, or rather, demerits, of Mr. Baker's letter. We shall now only remark, in the first place, that we consider the proposal to send out barristers to investigate a medical question, to be of a piece with that philosophy which has made barristers both head and tail of the Board of Health; and, secondly, we must inform Mr. Baker that, knowing nothing of Dr. M'William, we analysed his Report, when we received it, with as much care and anxiety to arrive at the truth as any barrister could have bestowed on it, and that we are prepared to uphold the conclusions we arrived at against Mr. Baker and all the gentlemen of the long robe together.—ED. *Medical Times and Gazette.*]

clothes were not taken ashore. Those who know anything of men-of-war are aware, that the clothes of the crew are washed and scrubbed on board."—*Medical Times and Gazette*, p. 541 (1852).

Surely this is a second edition of Cafliero and Villalunga!

(a) "But the soldiers had, only a week before they were seized with fever, come from Porto Sal Rey, where, at least in a theoretic point of view, the condition of the soil, during and after the rainy season, is such as may cause fever. Assuredly many bad fevers have been attributed to less obvious causes."—Dr. M'William's "Report," p. 105.

Lind, some eighty years ago or more, warned navigators against remaining at Boa Vista in the rainy season.

"The heat is extreme from November to July, and for the rest of the year storms and fogs are prevalent, and the climate is exceedingly unhealthy."—M'Culloch's "Geological Dictionary," Article, Cape de Verd Islands.

EXTRAMURAL INTERMENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—As you have kindly taken upon yourself the advocacy of the abolition of interments in populous places, on account of the unhealthful tendency of the practice, I venture to offer you a slight sketch of the history of the burial of the dead in this country, which may not be uninteresting to your readers.

This practice, which has such an evil tendency, is peculiar to Christian countries; and its introduction seems to have arisen from the circumstance of the clergy being interred within the churches or monasteries to which they were attached while living, or in chapels built as monuments to perpetuate their names. Persons of note, such as kings and nobles, and others of distinction, claimed a licence to be thus interred; then the wealthy purchased the right of burial within the Galilee and the church; and the poor then were interred within the precincts of the boundary, as being considered most sacred (next to interment within the walls) for such a purpose as the depository for the remains of the dead. But this system of interment early grew into a custom, fraught with many evils to the health of the living; and there were many edicts, and other prohibitory Acts, passed to prevent interments in populous districts, accompanied with heavy penalties for any infringement of the law; while, in the United Kingdom, the Government, till the subject was forced upon them by Mr. G. A. Walker, never interfered in the matter, from an apprehension on their part, that they would be interfering with the vested rights of the clergy.

The proximity of the graves to the churches, afforded the clergy great facilities in performing the rites for the dead, and contributed not a little to the introduction of intramural interments as a general custom; and the emoluments arising from the burial, together with the vanity or religious enthusiasm of relatives, assisted to continue this system of interment, fraught so much with evil and disease.

Evelyn (speaking of the great fire of 1666, "Sylva,") says: "I cannot but deplore, that when that spacious area was so long a rasatabula, the churchyards had not been banished to the north of the walls of the City, where a great inclosure, of competent breadth, for a mile in length, might have served as a universal cemetery to all the parishes, distinguished by the like separations, and with ample walks of trees, the walks adorned with monuments, inscriptions, and titles apt for contemplation and memory of the defunct." Nearly two hundred years have passed, and yet little has been done to raise the subject of interment of the dead in the midst of the living beyond the standard of speculation or private enterprise.

In 1814, the then Commissioners of Improvements of Westminster reported to Parliament that St. Margaret's churchyard could not, consistently with the health of the neighbourhood, be used much longer as a burying-ground, for that it was with the greatest difficulty a vacant place could, at any time, be found for strangers; the family-graves, generally, would not admit of more than one interment, and many of them were too full for the reception of any member of the family to which they belonged. The churchyards are, many of them, raised several feet above the level of the adjoining streets by the continual accumulation of mortal matter; and there are others in which the ground is actually probed with a borer before a grave is opened. The refuse of the churchyards are disposed of either "as bones," which are sent every opportunity to be crushed in the mills of the North for manure, or by fire, when "the flesh" is actually destroyed in masses taken from the "decayed and fresh corpses," and the "coffin-wood is used as fuel" to consume the pestiferous mass; this is done nightly in densely populated districts. Yet, with all this clearance, the number of the dead increases in such frightful disproportion to the space allotted to them, that it is a matter of serious thought whether, without any enactment, the magistrates of each district could not interfere and prevent the injury done by the burial of the dead, under such circumstances, so unfavourable to health. Scenes like those described are alike revolting, whether considered with regard to the decency and respect with which the surviving friends desire that the remains of the dead should be treated, or considered in regard to public health, and have led to that attention being drawn to the matter which otherwise might have remained unminded still longer; but the passing of the Act for a General Cemetery Company, in 1832, changed the public mind from the facts, that the poor could not pay the high rates of charge exacted at the cemetery, and that they must still be interred in the Metropolis, and perpetuate the evil. The rich do not live in the vicinity of the grave-yards, but they often take their seats in churches ventilated through the vaults in which the dead are decaying, giving to the living a lesson of pestilence at prayer-time. Yet the poor live, and disease is created, year after year, in the

neighbourhood of the grave-yards, under the names of cholera, fever, etc., or any other epidemic which the effluvia therefrom may cause. The number of cemeteries has increased, and there are six chartered companies now in existence; yet it was not till Mr. Walker took upon himself the arduous and ill-requited task of proving that we were creating a pestilence around us by the practice of the interment of the "dead in the midst of the living," because the evil which Mr. G. F. Carden thought could be remedied by private speculation in cemeteries, after the model of "Père la Chaise," only increased the number of grave-yards, without advancing the object intended, of decreasing the number of burials in the Metropolis, from the heavy expenses attendant on the funeral; and the heavy charges incurred at the cemetery, which are far beyond the limited means of the poor, who incur two taxes thereby,—that of the old parish fee, as also the new ground,—are preventives to many persons.

The new scheme for a cemetery at Woking-common, as the "Necropolis," may be but a perpetuation of the evils of heavy charges and high remuneration for the shareholders, and will require the strict surveillance of the Government, both in their valuation for purchase, and the limits of the schedule charges for interments.

In all other countries, the burial of the dead is in the Government; in this country, it is in the possession of those whose business it is to make great overcharges, and preclude the possibility, with many, of even decent interment.

The great pestiferous evil is, I trust, about to be remedied, and the charges for interment will be regulated by a scale at once fair and moderated to the trouble given, not left to the mercies of the undertaker or speculator.

Excuse the length of my communication; yet it is but the mere heads of the subject, as considered relatively with the many and persevering attempts made at different times by philanthropic individuals, who perceived the destructive tendency of the custom of intramural burial, and sought to prevent, by some means, a repetition of the annual malaria caused by the practice; and it has been found that, even while in the hands of the Government,—even in the hands of the Ministry,—pecuniary and private interests have stepped in to mar a public good, and the general health might have been sacrificed for private benefit or emolument.

I am, &c. WM. J. HUGHES.

MEDICAL PROVIDENT INSTITUTIONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Though I am no controversialist, and, if I were, though I have no disposition to enter the arena with Mr. Grainger,—yet I do think it desirable that men should be able fully to make up their minds as to the kind and degree of support which they ought to give to the several schemes now afloat for the benefit of medical men or their families. Of these, a general impression seems to have got abroad, that the British Medical Fund will not be able to keep its ground, and that it will give place to its more fashionable junior, the Medical Benevolent College. I confess I shall see its extinction with regret, for, although it originated in miscalculation and error, and although the supposed benefits of its originator, Mr. Daniell, had no foundation in fact; yet, when it was taken up in a business-like manner by Dr. Forbes and others, I heartily wished it success as a good provident institution, and as such supported it. As a quiet looker-on, I regret it should be superseded by an Institution which promises highly, but which I do not think calculated to be useful in nourishing and educing provident habits. You see, Sir, that I place the Medical Benevolent College under the head of "Provident Institutions," and, as such, class it with the local provident institutions of the kingdom, with which it is more nearly allied, and with which it has been recently proposed, by Dr. Soulby, that it should be in some measure amalgamated. Now, perhaps, I shall be here met with a flat denial; but it will be seen, that its constitution is really such, and that in one way or other its advantages will be given, not to the most distressed objects,—not to any who have not fifteen pounds a year; and that this annuity can only be conferred by election—by election of subscribers at large—thus subjecting the candidate to all the degrading process and anxieties of a canvass, and introducing the traffic in votes, the bartering of votes, the purchase of votes, and finally giving success to those who have the largest number of friends, and of wealthy friends, at command. I confess I cannot look upon these results without pain, because, by a misnomer, the charitable mind has been taken away from the only really benevolent fund in the kingdom, and has given its aid and its influence to a fund which contains within itself the elements of so much painful feeling. I do not wish to put these two institutions in opposition; they admit not of comparison; and, though they may go on together, the latter Institution will always be found necessary to relieve the truly destitute, or the parties suffering from temporary distress, who cannot be relieved from the College. It is to be remarked, that all the support afforded to the Benevolent College is not purely disinterested. Within my own knowledge, one gentleman has avowedly exerted himself in its favour, in order that he may stand well with the Committee, and gain such influence with them as may be useful in obtaining for his children the benefits of education. But, for a moment, let us consider the question of annuities. And here it may be remarked, as in a recent paper of the Benevolent Fund Committee: "That it must be obvious to every reflecting being, how infinitely superior are the blessings conferred by these small annuities, enjoyed at home, and surrounded by all the charities of life, to those which could be obtained in any other less private way, and without these advantages." In fact, the attempt at centralisation in the Benevolent College is to be looked upon as an evil, not as a good. Human nature is the same everywhere,—imperfect; and experience has shown, that these asylums are, in fact, anything but the little heavens upon earth which are represented, and that they commonly form the nuclei for jealousies and ill-will in a thousand different shapes, which embitter the lengthening shadows of the evening of life, and that, though they may furnish bread and exterior comforts, they are mingled with the wormwood and the gall of irritated feelings, roused into action by the provocatives of society. The Benevolent College, with all the kind feelings of its most worthy projectors, is, in fact, attempting too much, and would have been more useful and more efficient had its objects been more limited,—had it, for instance, been confined to an educational establishment. Now, with its present multifarious objects, it will require an enormous outlay to complete the necessary buildings; and its present collected fund of 10,000*l.*, however liberal, will be small, compared with the sum that will be required; after which comes the necessary endowment to secure the annual income, which must be permanent, and not dependent upon annual subscription, which cannot be relied upon after a few years. Mr. Grainger's admiration of the Benevolent College arises from the multitude of its objects; my own apprehension of its ultimate failure arises from the same cause. True, that it professes to provide a home for the widow, or the disabled, worn-out practitioner, if they have 15*l.* a-year to live upon; but how many there are who have no such sum, those only can tell who are familiar with the distress brought constantly before the Benevolent Fund,—after all, the only fund which can relieve the casualties of life—which can provide for temporary distress, which can reinstate the ruined man in a position of self-respect, and restore him to provide for his own family,—which can assist the widow in her exertion to support herself and orphans—which can aid the education of these orphans without ostentation, and which can shed the blessing of annuities upon the hearth of home, and in the narrow circle where grow the moralities of life. Think not, Sir, that I am opposed to the Benevolent College; I wish for, and would forward, its success. But, while I see so many individuals bruiting its advantage, I do wish that the *audi alteram partem* should be observed, and that men should not give themselves *tête baissée* to its support, without having the opportunity of considering, that the plan before them is not perfection; and of deciding, whether it is not in their power to approach nearer to that most desirable attribute, or of realizing more of its power, by attempting less.

Far be it from me to damp the ardour of pursuit in any of the friends of the Benevolent College; but it is my duty to remind them, that there remains a purely charitable, unostentatious institution, which, for seventeen years, has gone on quietly, diffusing its blessings around it—without an expensive establishment—without large funds; but earnestly applying those funds with the one simple object of doing all the good they can accomplish in the sphere within their reach. It is my earnest desire, that every individual contributor to each of these institutions should also contribute to the other; and sincerely do I deprecate, that any one should excuse himself from such subscription, by the fact, that he had contributed to the other. Let every one subscribe to the Benevolent College, because he has been charitable in aiding the Benevolent Fund. Let every one subscribe to the Benevolent Fund, because he has been provident in aiding the finances of the Benevolent College. I am, &c. W. NEWNHAM.

SKODA'S THEORY OF CONSONANCE.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have read with surprise, in your Number for May 8, an article by Dr. Walshe, controverting Skoda's theory of bronchial

respiration and bronchophony, in a way showing, as I think, a misconception of the meaning of that distinguished auscultator in his use of the term consonance. It is well known, that when a distinct note is sounded, a vibration is often set up in any body in the neighbourhood, such as a tight string or enclosed column of air capable of sounding in unison or in the harmonic of that note, and thus an independent repetition of the sound is produced that may even be louder or continue longer than the original. It is also well known, that the box of the guitar, violin, or piano, by inclosing a body of air which sounds along with the strings, increases the intensity of the sound; also that the human voice, or any other sound is rendered louder in a roomwith solid walls than in the open air or in a tent, etc. All these phenomena are included by Skoda under the term consonance. Whether they are all fundamentally the same in origin, I must leave it to those more learned in mechanical philosophy to decide; and it is not very clear what Skoda's opinions are on that point, but he rather speaks as if they were. At any rate it is in that wide sense that he uses the term.

But in arguing the question, Dr. Walshe restricts Skoda's meaning to the first alone, namely, that in which there is an independent focus of repetition of the sound, and certainly succeeds in raising considerable difficulties in the way of its being a complete explanation of the phenomena of bronchophony. However, in attempting to solve these difficulties himself, he is obliged to fall back (at, 2ndly, p. 462) upon the principle of reflection, which apparently does not differ at all from what is included by Skoda under the term consonance.

Taken in its broad sense, I do not think Dr. Walshe has shaken Skoda's position, "that the varying conducting power of the healthy and diseased lung-substance cannot be taken as a basis of explanation of the auscultatory phenomena of the respiratory organs," as opposed to the theory of Laennec, who makes that circumstance a cardinal point in his explanation of many of the phenomena of anscultation. It would take up an unwarrantable portion of your time and space to go into all the arguments on both sides; but I may just allude to one which Dr. Walshe overlooks, and which appears all but decisive—namely, that founded on the occurrence of bronchial respiration in a hepatized portion of lung. The common explanation of that phenomenon—namely, Laennec's—is, that the solidified lung being a better conductor of sound than the healthy tissue, allows the rushing of the air through the bronchial tubes to be more distinctly heard. Now we know, that the more any portion of the lung is capable of expansion during inspiration, so much the quicker and stronger must be the stream of air through the bronchial tubes of that part; but it is precisely when the cells of the lung are impervious to air in a hepatized portion of lung, and therefore no perceptible stream of air can be passing through the bronchial tubes, that the bronchial respiration is heard. This is apparently quite decisive against the theory of conduction. The explanation of Skoda is as follows—(Die Percussion und Auskultation, 1st Edit., p. 81)—"When the walls of the bronchia ramifying in the portion of the lung-substance become sufficiently solid to reflect the sound, the respiratory murmur of the larynx, the trachea and the bronchi consonates in the air contained in the bronchial tubes so situated." In fact, the bronchial ramifications in a hepatized portion of the lung become, for the time, an instrument like the speaking-trumpet, or the sounding-box of the guitar or violin. I am, &c.

Liverpool. J. Drysdale, M D.

ENTROPIUM.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have read with great interest an article on "Entropium," in your last number, by Mr. Haynes Walton. Although I do not, by any means, agree with the talented writer, that entropium invariably depends on one and the same cause, namely, erroneous muscular action, yet I have long been of opinion, that entropium is dependent, in many instances, on excessive and faulty action of the orbicularis muscle. ("Treatise on Diseases of the Eye," London, 1835, Vol. II., p. 795.)

In my treatise on the diseases of the eye, I have treated very fully of the various forms of entropium, and have described, as a leading variety of the disease, that which Mr. Walton represents as its sole form. Having, in various other parts of my treatise, represented the frequent occurrence of entropium, (temporary or permanent), in consequence of erroneous and excessive action of the orbicularis muscle, and suggested operative proceedings, founded on this view of the pathology of the disease—operative proceedings, the same in principle as those suggested by Mr. Walton, I do not think he should have omitted all reference to my views and opinions.

I will conclude my communication with the following extract:—

"*Entropium produced by Spasm and Hypertrophy of the Orbicularis Muscle.*—Sometimes the orbicularis muscle is irritable and spasmodic in its action, or, from an increase in its volume, its power may be much augmented. A spasmodic state of the orbicularis palpebrarum is generally produced by an increased sensibility of the retina to light, and ceases on the restoration of the natural sensibility of this delicate texture; so that the treatment of entropium, thus produced, is, in fact, but the treatment of the ophthalmia with which it may be associated. The method of curing entropium arising from hypertrophy of the orbicularis muscle, consists in cutting through the palpebral integument quite down to that muscle, and removing with the curved scissors a portion of its fibres corresponding the extent of the entropium."—*A Treatise, etc.*, Vol. II., p. 795.

It will thus be seen, that, in the year 1835, I described a frequently-occurring form of entropium dependent on increased power and on erroneous action of the orbicularis muscle, and suggested, as the surgical remedy adapted to the cure of the disease, the removal of a portion of the fibres of the muscle.—I am, Sir, &c.

Birmingham. Richard Middlemore, F.R.C.S.

CHLORIDE OF ZINC PASTE IN FISTULA IN ANO

[To the Editor of the Medical Times and Gazette.]

Sir,—Allow me space in your Journal to request my surgical brethren to try the effect of the chloride of zinc paste in fistula in ano, having been successful in treating three cases by its use, which, otherwise, would have required the bistonry.

The ordinary paste, (chloride of zinc, water, and flour,) being entangled in a grooved probe, is passed up to the opening in the rectum. The point of a second probe or instrument is then placed in the groove, and passed just sufficiently high up, that, by its being retained in that position while the armed probe is withdrawn, the groove may be cleansed of the paste. This may be repeated every second or third day. I am, &c. E. Lacy.

Poole.

BITTER BEER.

[To the Editor of the Medical Times and Gazette.]

Sir,—You have already acquitted me of being "guilty of any kind of falsification," and express your pleasure that I came forward in a decided way to clear myself from even the suspicion of being a party to adulteration. With this, perhaps, I ought to rest satisfied; still, after the articles which had appeared on the alleged adulteration of pale ale, I considered it my duty to put myself in communication with perhaps the greatest authority of the day in matters connected with scientific research. Baron Liebig has long been interested in our peculiar system of brewing pale ales, and we have not unfrequently availed ourselves of his great knowledge in endeavouring to produce that which is the height of our ambition, a faultless pale ale.

The interval of distance has prevented my sooner sending to you Baron Liebig's opinions upon this question.

The subject of adulteration is, I hope, entirely set at rest. It will, however, be very gratifying to me if you will allow this eminent man to give the final blow, by inserting in your columns his letter to me, which I now enclose. I am, &c.

Henry Allsopp.

"The unguarded remark of a French chemist, that the strychnine imported into England is employed, in part, as a substitute for hops in the manufacture of beer, has lately spread alarm among the lovers of pale ale. Having been appealed to by you, to express my opinion on this subject, which appears to me to be, in a dietetic point of view, one of considerable public interest, I now offer the following brief statement:—

"About a quarter of a century ago, a brewer in Westphalia fell into the practice of adulterating his beer with nux vomica, from which it is well known that strychnine is obtained. The peculiar morbid symptoms, however, which resulted from the consumption of this adulterated beer, speedily led to the detection of the fraud. The effects produced by nux vomica and strychnine are so characteristic, that every medical man will readily detect their origin. The French novelist, Alexandre Dumas, has described them, though with more imagination than truth, in his romance of "Monte Christo." It is possible that the Westphalian case, which, from being made the subject of a criminal trial, obtained great notoriety,

has given rise to the assumption, that in England the strychnine imported is used for the purpose of mixing with beer. But nobody at all acquainted with the great breweries of that country, could seriously entertain the suspicion of an adulteration of beer with strychnine or any other deleterious substance. It is practically impossible, that any operation of a doubtful character could be carried out in these extensive establishments, on account of the large number of workmen employed in them. Any attempt on the part of the brewer, to impart qualities to his beer in an illicit manner, which are not to be obtained from malt or hops, would necessarily lead to his ruin; as he would be obliged to communicate his secret to too many persons, and to employ too many accomplices. The draymen themselves, as good connoisseurs in beer, would protest against any manipulation of a suspicious character. The case has even occurred, of an eminent brewer not venturing to make use of a method suggested to him, for the purpose of clearing his beer more effectually, because the addition of a new material to the wort might have induced a suspicion in the minds of his workmen, that it was an illicit proceeding, and this would have endangered the good reputation which his beer enjoyed. He stated to me, at the same time, that no improvement could be introduced into a brewery, the object of which was not perfectly evident to everybody.

"During a sojourn of several days at Burton-on-Trent, I had an opportunity of becoming intimately acquainted with the method pursued in the manufacture of pale ale. I convinced myself that the qualities of this excellent beverage depended mainly upon the care used in the selection of the best kinds of malt and hops, and upon the ingenuity exhibited in conducting the processes of mashing and fermenting. Our continental brewers have much to learn in these points to come up to the English brewers. I have no hesitation in saying, that England possesses the greatest adepts in malting. I know positively that the chief brewers of Munich, who, undoubtedly, produce the best beer in Germany, have gone through an apprenticeship in Burton. This may account for the predilection entertained by the general public, as well as by medical men, for these varieties of beer; for the instinct of humanity and experience appear to be as good guides in the choice of things that contribute to health and enjoyment as the profoundest philosophy.

"Professors Graham and Hofmann, in the excellent Report already addressed to you upon the alleged adulteration of the pale ale by strychnine, have indicated a very simple process for detecting the most minute quantity of strychnine contained in beer. I have satisfied myself of the great convenience and accuracy of their method, and have further assured myself, by an analysis of several specimens of pale ale obtained from London houses, supplied by your establishment, of the utter groundlessness of the imputation, that this beer was poisoned with strychnine. I am positive, and am supported in my views by the concordant analyses of all chemists who have occupied themselves with the examination of beer, that the poisoning of pale ale with strychnine has never occurred. I believe I may safely add, that it never will take place; for, although an ignorant brewer might be induced, from interested motives, to add nux vomica to his beer, the word strychnine so forcibly suggests one of the most virulent poisons, that whoever has heard anything about strychnine at all, is sure to be aware of this. By adulterating his beer with strychnine, the brewer would be knowingly committing a crime which, in the present state of science, must be followed by immediate detection and punishment.

"Mr. E. Merck, of Darmstadt, one of the most extensive strychnine manufacturers in Europe, informs me that this substance is peculiarly adapted to destroy vermin of all kinds. In many parts of Germany, it is the popular poison for rats and mice. This fact fully accounts for the large amount of the drug that has lately been introduced into commerce.

"The specimens of your pale ale sent to me, have afforded me another opportunity of confirming its valuable qualities. I am myself an admirer of this beverage, and my own experience enables me to recommend it, in accordance with the opinion of the most eminent English physicians, as a very agreeable and efficient tonic, and as a general beverage both for the invalid and the robust. "JUSTUS LIEBIG.

"Giessen, May 6, 1852."

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Comments have often been made on the new "dodge,"—shall I term it so,—of prolonging the debates at this Society for only one half hour after the usual time of closing; indeed, I have frequently heard medical men complain of the injury this habit does them in practice, as they never know now when the debate will be finished, as there are always some there who will talk for the sake of talking, and of seeing their names in print, tacked on to a larger or smaller amount of nonsense, as the case may be. But matters on Tuesday evening last transcended all others: a long and interesting paper by Dr. Kirkes was read; the lecture concluded at ten minutes to ten, and a short debate followed, which closed at ten minutes past. But the President was not satisfied, and he called upon some one to propose, as usual, that the debate be continued one half hour longer. No one answered the appeal, and he commenced dismissing his audience, when one of the fellows arose and began speaking to the question. At this, the President informed him he must first move the proposition just stated, and then, if carried, he might continue to chat about fibrin. This was done, and a seconder was found, but the motion was defeated, on a show of hands, by a majority of nearly two to one. Of this, however, the President took notice, nor would he have done so, but for a whisper from one of the Secretaries, startled at finding a large number of fellows on the point of leaving. After a little private conversation, when the greater part of those who were opposed to the continuance of the debate had left, the President called for another show of hands, and, I believe, carried the day.

Now, Sir, is this fair to the Fellows and visiters? They make their arrangements to stay till 10 p.m., and perhaps have appointments, or patients to see afterwards, or may have friends waiting for them at home, or may be desirous of rest after the toils of the day, but are called to stay out a discussion of another half hour, in order to give some gentleman an opportunity of having his speech reported in the medical journals. My life on't, if there were no reportings, we should not have any prolonged debates.

Yours faithfully, M.R.M.C.S.

THE CLAIMS OF HOMŒOPATHY TO THE CONSIDERATION OF ITS OPPONENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In requesting the favour of the insertion in your periodical of the following remarks, I rely upon that spirit of fair, open, and honest inquiry which has always characterised it, and which has gained for it the admiration of so many members of my Profession.

When medical men are asked by the public, what they think of homœopathy, their universal reply is, "Humbug!" and this, too, when they have never taken the pains to study its principles or observe its practice. Does not this imply, that they are satisfied with the old system,—that it has, in their opinion, reached something like perfection, and is not, like other systems of old, susceptible of improvement? And yet, if we watch the bedside practice of these men, what is the result? Let any candid student, in quest of a rational system of physic, attend carefully to the practice of our great hospital physicians, and he cannot fail to be convinced, by their various and opposite methods of treating the same diseases, that they are inwardly conscious of the defective state of therapeutics, and of a sad want in this respect of something like a fixed, guiding principle. In proof of this, I might adduce many cases; but let it suffice, that I have myself seen cases of pleurisy, pneumonia, and acute rheumatism, under the care of the most eminent physicians in London, treated by lemon-juice, which cases, by other eminent physicians, or by themselves at other times, would be treated by bleeding, cupping, calomel, opium, and tartar emetic. I have also seen all the cases in a clinical ward indiscriminately treated for weeks by a quack medicine called "Warburg's Tincture," the composition and properties of which were totally unknown to those prescribing it. I say, then, that, when we see the leading men in our Profession deserting the old and more generally received methods of treatment, for others which are new, or opposite, or unknown, it is fair to conclude, that they are either guilty of wanton cruelty to their patients, or, as I believe, that they are conscious of the defects of the present system of therapeutics, and anxious to discover a better. Adopting, then, the latter supposition, I shall proceed to show, that they are bound to consider the system of homœopathy, and put it to the test of practice.

There are but two kinds of truths,—(*a*) those which may be discovered by *à priori* reasoning, which are implied in what we already know, are elicited by reasoning alone, and not by observation or testimony; and (*b*) those which are commonly called "matters of fact," which, before they were discovered, were absolutely unknown, and not implied by anything we previously knew; these we could never possibly arrive at by the internal workings of our own minds;

we gain them by observation, experiment, and testimony; and if the observations and experiments have been carefully conducted, and the testimony respectable, we assent to the truths. To the former class belong the truths of mathematics and metaphysics, which a man may reason out in his arm-chair. To the latter belong most of the truths in medicine, which can only be arrived at by experience and observation. These two classes of truths are well illustrated in the well-known and often-quoted words of Sir J. Herschel:—"A clever man, shut up alone, and allowed unlimited time, might reason out for himself all the truths of mathematics, by proceeding from those simple notions of space and number of which he cannot divest himself without ceasing to think; but he would never tell, by any effort of reasoning, what would become of a lump of sugar, if immersed in water, or what impression would be produced on his eye by mixing the colours yellow and blue—results which can be learnt only by experience." Now, it requires no argument to prove, that homœopathy belongs to the class which we call "matters of fact." No *à priori* reasoning, therefore, can possibly decide whether or not globules produce the effects attributed to them. A long series of experiments, carefully conducted by men of intelligence and good character, alone can decide this point; in short, in order to pronounce upon homœopathy, we must put it into practice. I am consequently at a loss to conceive what has become of the philosophy, the logic, and even the common honesty, of those members of our Profession, who boldly pronounce upon a "matter of fact" without consenting to fulfil those conditions which are essential to the settlement of all such questions. In this particular, the public are their superiors in intelligence. They well know, and feel, that there is no force or conclusiveness in the reasonings of a man upon a "matter of fact." Their plain question is, "Have you tried it?" or "Have you seen it tried?" and, if the reply is, "No," then all their subsequent arguments have not the slightest weight. To all this it may be objected, that, upon precisely the same grounds, medical men are bound to try "Holloway's Pills," or, indeed, any and every other quack remedy. To this I would reply, that, in the case of "Holloway's Pills," the conditions, (viz., respectable testimony and carefully conducted experiments,) essential to the settlement of questions of "matter of fact," are wanting; whereas, in the case of homœopathy, we see a large hospital devoted to its practice, supported by some of the most logical, intelligent, and honest among the public, and superintended by medical men of eminence, intelligence, and respectability. We have, then, in homœopathy, a question of a "matter of fact," with all the conditions necessary for its determination; and I say fearlessly, that the physician who refuses to apply himself to the subject, and put the system into practice, or watch the practice of others, is not a worthy member of his Profession, because he omits a duty which he owes to himself, to the public, and to his Maker!

I have been, and am still, strongly opposed to, and prejudiced against, homœopathy; but I see clearly, that I committed a great mistake in endeavouring to settle the matter off-hand, by *à priori* reasoning; and I would now approach the subject in the true spirit of Lord Bacon, who says: "All idols must be abjured and renounced, with firm and solemn resolution, and the understanding must be completely freed and cleared of them, so that the access to the kingdom of man, which is founded on the sciences, may resemble that to the kingdom of heaven, where no admission is conceded, except to children."

Trusting you will oblige me by an early insertion of these remarks, I enclose my card, and remain, &c.

London. ALLOPATH.

[We publish this letter because it has been sent to us by a regular practitioner; but we do so with some scruple, as it is evident that the writer is not conversant with the subject. No one ever pretended that homœopathy is to be refuted by *à priori* reasoning; it has been refuted by direct experiment, as in the Paris hospitals many years ago, and by analysis of the dogmas on which it is based. Our correspondent appears to us peculiarly unfortunate in his illustration of the different kinds of method of investigation. Mathematics and metaphysics are, equally with medicine, founded on experience and experiment.

As to ordinary therapeutics, no one ever pretended that the subject is perfect. Medicine, like all sciences, is to be advanced by experiment and observation. We treat rheumatism now with a certain degree of success; there is no reason why we should not endeavour to find out a better method.

If medical men are so little conversant as is our correspondent with the true foundation of therapeutics, and with the true method of advancing the art of healing, we do not wonder that they find themselves beaten in argument by the homœopaths. "Allopath" is even apparently ignorant of the derivation of the signature he adopts; otherwise, we think, so close a reasoner would scarcely have employed it.—ED. *Medical Times and Gazette.*]

NEW CHARTER OF THE COLLEGE OF PHYSICIANS.

[To the Editor of the Medical Times and Gazette.]

SIR,—As a draft of a new Charter of the College of Physicians is before the Profession, I take the liberty of asking you, whether "such testimonials of character and professional qualification as shall be satisfactory to the said Censors," have any reference whatever to professional character, as involved in a total departure from the customary fees of physicians, fellows, and members of the College?

Will the M.D. be admitted a member who accepts a single fee of 5s., whose visits are made at the paltry rate of 2s. 6d., or it may be for 2s. when the florin comes into use, and journeys, and even journeys in consultation, as I have heard, at the charge of 1s. per mile? There can be no honourable competition, much less friendly co-operation, where such professional delinquency is found.

If a bond of union is wanting, made up, not of written rules and regulations, but of unwritten, but well-understood and honourably-practised observances, as a portion of the medical ethics by which our Profession should be governed, there is very little hope of advantageous union for the moral, material, or social welfare of physicians.

The lawyer's charges are regulated by law; the barrister's fees by custom, which, in the absence of law, binds an honourable profession; among clergymen there is a customary remuneration.

Is the cutting system of the tradesman to be forced upon the physician? The physician whose privilege it has been to do much gratuitous service, taking from those only who can afford a fee in gold, but an *aurea mediocritas*, as the Property and Income-tax Commissioners well know. I am, &c.

M.D. EDIN.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

JOHN BISHOP, ESQ., F.R.S., President, in the Chair.

CASE OF GANGRENE OF THE LUNG.

Dr. Halley read an extract from a letter, giving an account of an interesting case of gangrene of the left lung, which occurred at the Merchant Seamen's Hospital at Hong-Kong, under the care of Dr. W. A. Harland, of that Hospital:—"An American sailor was brought to the hospital in such a condition as almost to preclude all hope of his surviving beyond a few days. On the second day after his admission, he fell out of bed, and on being raised up again, he complained of severe pain under the left mamma. Dr. Harland immediately examined the part, and found a swelling of considerable size, with distinct fluctuation. With some hesitation, he made a small incision, and finding an escape of pus only, he enlarged the opening to about an inch and a half in length, when upwards of half a pint of extremely fetid pus, with small shreds of gangrened lung, were evacuated, the discharge being suddenly stopped by a mass of the dead lung itself protruding through the orifice. By gentle traction with the forceps, he was enabled to withdraw this to the extent of nearly two inches; but finding it not yield any further, and afraid of hæmorrhage if he cut it, he applied a poultice, which was renewed every three or four hours, and at each dressing pulled out the lung a little more as the opening increased in size by ulcerative absorption. On the third day after the incision was made, the protruding mass became so troublesome and offensive, besides exhibiting some appearance of spontaneous separation, that Dr. Harland removed it with the knife. No hæmorrhage occurred, and the opening appeared to be filled up by the pericardium, (as by a valve,) which gradually became thickened, and adherent all round to the parietes of the chest. The detached piece of lung would scarcely go into a pint measure, and weighed

nearly a pound. The man rapidly recovered, and about three months afterwards shipped again as a seaman, in a vessel bound to New York." Dr. Harland subsequently writes:—"Last month (Dec. 1851), I was agreeably surprised by a visit from my old patient, who came to show me that he was alive and quite strong and hearty again. It appears, that, in consequence of the ulceration having exposed a part of one rib, some discharge continued to ooze from the wound for some months after he left me, on which account he went into one of the hospitals on his arrival in New York. Under medical treatment for a short time, the wound soon healed, and his case excited considerable interest, almost all the principal medical men there having visited and examined him. From New York he went to sea again, and then to the mines in California, where he worked as a gold digger for above a year, and at last he returned to Hong-Kong, where he arrived last month. He told me he could work as well as ever, and had never been troubled with cough since he left me; the only difference he could perceive was, that he thought he was rather shorter breathed than before, if he had to exert himself strongly for any length of time. A marked difference, too, is at once perceptible in the relative dimensions of the two sides of the chest. He went back to California a few days ago (Jan. 29, 1852)." Dr. Halley regretted, that more particulars were not added in regard to the subsequent physical and auscultatory signs, but hoped, at a future time, to lay them before the Society; at the same time, he thought the case so remarkable and unique as to be well worthy their attention, even in its present form.

Dr. Cotton brought under the notice of the fellows

A NEW MODE OF APPLYING TOPICAL MEDICATION TO THE LARYNX.

After adverting to the subject as recently discussed by the Society, and repeating his conviction, that the ordinary practice of passing a sponge into the larynx was not only in the majority of cases practicable, but also unproductive of injury; he had, nevertheless, felt that it would be desirable, should it prove equally beneficial to the patient, to apply the solution of nitrate of silver without actually introducing the sponge. He believed that there were many practitioners who, whilst admitting the great probability of local applications proving useful in certain laryngeal diseases, were unwilling to employ them, from a fear of the operation. The introduction of the instrument was also frequently alarming to the patients themselves; and there was the chance, although a slight one, of the sponge being pulled off by spasm of the larynx. To remedy such inconveniences, Dr. Cotton had requested Mr. Coxeter to make the simple instrument he now exhibited, and which he had successfully employed in a number of cases at the Hospital for Consumption. It consisted of a pair of curved forceps with flattened blades, to one of which was fixed in a peculiar manner a small piece of sponge, intended to contain the solution. The tongue being depressed and drawn forwards, as in the other method, the forceps are introduced into the mouth, and, at the proper moment, the contents of the sponge squeezed into the larynx. It might be supposed, that the solution would sometimes fall into the trachea without touching the mucous surface of the larynx; but this could seldom, if ever, happen, for a small portion is almost sure to come in contact with the latter, and the cough and spasm, which always immediately ensue, must effectually scatter the application. Several patients, upon whom the other instrument had been previously used, had greatly preferred the employment of the forceps. Dr. Cotton hoped to bring this subject more fully before the Society at a future period; in the meantime he would commend its consideration to the fellows.

Dr. Camps inquired the strength of the solution used by Dr. Cotton. He understood him to say, a saturated solution; was it so, and did he use it in all cases of phthisis?

Dr. Payne Cotton replied, that if he used the phrase "saturated solution," it was an error; he should have said, the sponge saturated with the solution. He did not know, in fact, what the strength of a saturated solution would be. He had, at first, employed a solution of the strength of ʒss. to ʒi. of distilled water, but this he found caused too much irritation; and he now employed a solution, varying in strength according to the circumstances, from gr. v. to ʒj. to the ʒi. of the solvent. He did not use it in all cases of phthisis; in very advanced cases the chances of relief being afforded by it were so slight, that he did not think it right to subject the sufferer to the annoyance of the application; but in early instances of laryngeal phthisis, and in cases of laryngeal disease, independent of phthisis, and also in the aphonia to which hawkers are peculiarly subject, its application was very beneficial, and such as to warrant its employment. He should, with the permission of the Society, bring the subject before them some time during the next session.

WHAT IS METASTASIS?

Mr. Pilcher stated, that his object in selecting this subject for his address to the Society was to afford an opportunity for the fellows to determine whether such a condition as that generally understood by metastasis really existed; and if so, to more accurately define and limit its meaning,—the more particularly as, upon the term being used during a former discussion, a distinguished member of the Society frankly declared he did not know what metastasis meant. The term—from *μέτασταω*, "I transfer"—was employed by the ancient physicians to designate the transposition of a disease, its nature remaining the same, from one organ to another. They designated, under the name of diadosis—*διαδοχή*—the transformation of a disease into an affection of a different nature, and occupying another organ. Thus, when hæmoptysis replaced a suppressed hæmorrhoidal hæmorrhage, it constituted metastasis; when a disease of the skin terminated in chronic inflammation of the chest, it formed diadosis. The moderns have united these two orders of phenomena under the single term metastasis, which expresses indiscriminately a change, whether in the seat only, or at the same time both in the seat and in the character of the disease. Does metastasis occur independently of fixed rules and general principles? Is it not, in fact, an aggravation of the general laws of disease, which is for the most part secondary, or even ternary, and not infrequently quaternary, and when fatal, is generally consecutive of a preceding affection; of which abundant examples are presented in internal inflammations, and in fevers, both idiopathic and symptomatic, of which Mr. Pilcher mentioned several instances. The difference between symptomatic or sympathetic disease and metastasis is very slight, if it exist. Mr. Travers, in his work on Constitutional Irritation, appears to consider them as identical. There are three modes, certainly, in which symptomatic or secondary diseases arise—first, continuity or contiguity of structure; second, association by means of the nervous system; third, similarity of function; and perhaps fourth, unity of an apparatus of dissimilar organs to produce one function; and fifth, identity of structure and function, though in health producing a different result, and the organs situated at a distance from each other. Of each of these causes of secondary disease—or of metastasis, as it is sometimes called—several examples were given; among others, of the first, erysipelas was noticed, extending to the structures beneath, to the fasciæ and the muscles, through the scalp to the pericranium and bone, and on to the cerebral membranes and brain; also from the face along the entire alimentary canal; or in the reverse direction. Of the second, the known sympathies between the stomach and brain, between the kidneys and the thighs; between the hip and the knee, the liver and the shoulder or neck; between the intestines and the spinal marrow, through the medium of the great sympathetic; and probably, by these means, between every part of the animal economy. Of the third, similarity in function, perhaps the most interesting of sympathies, examples were noticed in the skin and lungs, the skin and the kidney, the skin and mucous membranes, the lungs and the liver,—the last so well seen in the effects of temperature upon the two organs, the cold climate requiring an inordinate action of the lungs to furnish the requisite caloric, and thus necessarily disengaging the carbon from the system; the more elevated temperature demanding a less amount of respiratory function, calls upon the liver to secrete a proportionally larger quantity of carbon; hence the greater or less degree of action in the two organs augments or diminishes the predisposition to disease. Of the probable fourth mode of sympathy in disease, the examples of the digestive apparatus, of the circulatory, and of the urinary and generative, were afforded. It was certain, also, that the other three kinds of *modus operandi* exerted their full influences in producing consecutive affections, as stricture of the urethra, destroying, through disease in the bladder, the ureters, or the kidneys; yet disease of the kidney will irritate the urethra, without producing apparent affection of the ureters, or the bladder, and the reverse; likewise affections of the stomach excite disease in either extremity of the digestive canal, leaving the intermediate portions healthy, as far as symptoms allow the recognition; affections of the liver being followed by disease of the spleen, and the reverse. Of the fifth mode, examples may be adduced in the association existing between the voluntary muscles and the heart, the voluntary muscles and the diaphragm; the former indicated in muscular rheumatism affecting the heart; the latter seen in the spasm of cholera alternating between the external muscles and the diaphragm. It is difficult to account satisfactorily for this metastasis of disease from the voluntary to the involuntary muscles upon known physiological principles; yet it must be similar to that from one fibrous structure to another, which is so constantly witnessed. The difference in function between these two sets of muscles is

proved, by the excito-motory doctrine, not to be so great as formerly imagined, since all muscles possess an involuntary action, and the different arrangement of their fibres may be insufficient to lessen their general predisposition to disorder; these facts being allowed, it may be readily comprehended that the inordinate action of the great engine of circulation should, during the fever of rheumatism, place it in a condition peculiarly liable to be secondarily affected by the existing general disease. Metastasis is not unfrequently confounded with coincidences in disease; different affections occurring at the same time, either from the same or from different causes; and likewise proceeding from the same cause, though developed at a distant period of time; examples of which are frequently seen in instances of mechanical accidents, and in affections arising from poisons, and particularly from poisoned or malarious atmospheres. In many such cases, diseases of different organs may have no other relation than that of similarity of predisposition and of cause. Counter-irritation affords one of the best examples of the so-called metastasis, though, being usually excited artificially, it is denominated a devitant; hence exists the marked difference in the two conditions. A "materies peccans" is supposed to account for the transference of disease; and, in many instances, a morbid state of the blood gives rise to affections consecutively occurring in distant organs or tissues; but so far from being cases of metastasis, these blood diseases are continuations of the same affection, locally developed here and there, and at various times, as predispositions and existing circumstances may determine. At present our knowledge of this "materies peccans" is too vague and speculative to justify the foundation of a pathological doctrine. Among the examples of metastasis were mentioned: first, that of arthritic rheumatism to the heart or to the brain, accounted for by a like structure (the fibrous) in each being affected, and the then existing peculiar predisposition in the relative organ to be influenced by the general disease. It is also most frequently an addition to the inflammation of the joint or joints, and not a substitution, the original local affection continuing its course. Preparations illustrating this condition were shown, in which the inflammation of the knees suddenly subsiding, the pericardium became acutely inflamed, and proved rapidly fatal. Gout passing from one joint to another, and from the joints to the viscera, obeys the same laws as rheumatism, though appearing most capricious in its relations and in the rapidity of its transposition; more frequently than otherwise occurring as the consequence of a local cause. A gentleman had gout in the right great toe, with a red spot on its side, no other symptom existing. Upon leaving a warm bath, he struck the left great toe; instantly the gout left the right, and appeared with a similar spot in the left toe. A martyr to the gout was persuaded against his judgment to take a glass of champagne; before he had half emptied the glass the gout appeared in his foot. Gonorrhœa producing epididymitis is merely an extension of inflammation along the vas deferens; the occasional non-appearance of disease in the spermatic cord is no proof of its non-existence. Gonorrhœal ophthalmia can generally be traced to direct inoculation, and most probably always so arises. Gonorrhœal rheumatism and gonorrhœal lepra are most probably blood diseases. The secondary and ternary diseases of syphilis are certainly the results of a poisoned condition of the blood. The metastasis of mumps to the testicles, and to the mammæ in girls, possess a considerable apparent peculiarity, both in their great frequency, and in the dissimilarity of the affected organs in their structure and functions. The idea of this peculiarity may be lessened, though it may not be accounted for, by the fact, that the metastasis usually occurs when the testicle or breast is especially predisposed to inflammation, it then being in a state of almost, but not quite, complete development; besides which, there appears reason to believe that an association exists between the development of the salivary glands and that of the generative organs, as well as between the latter and the organs of voice,—an interesting circumstance occasionally exemplified in man, and constantly in the varied development of these glands in the entire and castrated neat animals. Purulent deposits, or secondary suppuration in distant tissues, cannot be accounted for on the supposition of absorption only, either through the medium of the lymphatics or of the veins, or of both, though it is not to be denied that pus-globules are occasionally received into the blood. Dr. Froriep is of opinion, "that the materials going through the capillaries to the blood are in a state of solution, and do not contain globules, for the porosity of the membrane is not sufficient to permit the passage of globules of pus, so that the appearance of such globules must be co-existent with the effusion of matter. Hence it is incorrect to suppose that a direct discharge of globules of pus takes place into the sac of the pleura, the peritonæum, or the cavity of the arachnoid, as it is said in purulent metastasis; and it is equally erroneous to imagine that, where pus ceases to be secreted from the surface of a sore, it has been transported in the current of the circulation, and deposited in some internal organ where inflammation is going on." It must, however, be conceded, that these "depôts of pus" are the result of a morbid state of the blood, derived from the original abscess or suppuration, and the localization of the new inflammation and its consequences is determined by peculiar local conditions. In most cases, and perhaps in all, the metastatic affection occurs in similar structures, though it may be in dissimilar organs; nor does it necessarily terminate in suppuration or purulent deposit, though originating from that source. A young man was inoculated with glanders from a dead horse; suppuration of the joints occurred, first in one, then in another; the external inflammation suddenly subsided, and he rapidly died from suppuration of the peritoneum. A post-boy had an abscess in the axilla; in a moment he became raving mad; a drachm of laudanum was administered, the abscess was opened, and he at once recovered. A man with a cavity in the lung suddenly became deranged; the disease of the lung was arrested; he was committed to prison in consequence of his violent actions, and thence sent to a lunatic asylum; when the mind was restored, the lung renewed its diseased action, and quickly proved fatal. A boy, 10 years old, struck his left leg on the 22nd of January, but did not much complain till the 25th, when he went to bed. On the 27th, he was admitted into St. Mary's Hospital, complaining of great pain in his leg, which was swollen, and very tender. Upon examination, he was found to labour under pericarditis and pleurisy, from which he died on the following morning. The *post-mortem* examination showed periosteal abscesses of the left leg and thigh; recent pericardial and pleuritic adhesions; purulent deposits in the lungs, heart, and kidneys, and thickening of the popliteal vein. The metastasis of disease from the skin to the lungs, and almost invariably to the mucous membrane, however it may afterwards extend to the other tissues, is too common to need cases of illustration, and unhappily too frequently fatal in acute affections, and especially in the exanthemata. Many of these cases are attributable to evident extension along the surface of the allied membranes; others to the arrest of the cutaneous function, exciting that of the respiratory. It should never be forgotten, that the external and internal dermoid structures are mere modifications of each other. Similar observations are even more applicable to the association in disease of the skin and intestinal mucous membrane, in which metastasis, however, the affections are more frequently found to be chronic. How constantly it was customary to rank uterine phlebitis, with all its distressing consequences, under the head of metastasis, whereas it is now completely proved to be an extension of disease along the veins, not infrequently attended by the supposed absorption of pus. One of the most remarkable examples of so-called metastasis is seen in the effects of a slight external injury, terminating in delirium, and even producing a fatal shock. From the foregoing facts and remarks, Mr. Pilcher considered it a fair and reasonable deduction, that though the term "metastasis" may be very conveniently and usefully employed in its limited sense, such a condition as it is generally meant to imply, does not really exist; that the very large majority of these cases are to be accounted for upon the general and recognised principles of physiology and pathology; and that, in the occasional instances in which such known laws and the presented facts cannot be reconciled, it is due to our own imperfect acquaintance with those laws and principles, and not to any vague and capricious action of Nature.

Some desultory conversation followed, but nothing was elicited rendering a report necessary.

MEDICAL NEWS.

Military Appointments.—Gold Coast Corps, Staff-surgeon of the 2nd class, Thomas Kehoe, M.D., to be Surgeon. Hospital Staff Assistant-surgeon, William Donneland Marchant, to be Staff-surgeon of the second class, vice Dolce, deceased. Assistant-Surgeon, James Davys, from the Gold Coast Corps, to be Assistant Staff-surgeon, vice Marchant, promoted.

Naval Appointments.—Surgeon Archibald J. Little (1845), to the Basilisk, steam-sloop, at Portsmouth; Assistant-Surgeon Daniel W. Stephens, M.D. (1848), from the Highflyer, steam-sloop, to the Basilisk. Assistant-Surgeons Daniel Finucane, M.D., (1851), confirmed to the Fantome, 12, sloop, on the Australian station; F. G. Barr, (1852), to the Fisgard, flag-ship, at Woolwich; Henry Williams, (1852), to the Vulcan, steam troop-ship, at Portsmouth; George More (1848), from the Impregnable,

flag-ship, at Devonport, to the Nereus, 42, store depôt at Valparaiso; E. R. Prouse, (acting), to the Portland, 50, on the Pacific station.

Obituary.—On the 21st ult., John Lewis, Esq., Surgeon to the Forces, half-pay officer in charge of the medical stores, Fort Pitt, Chatham, in the 78th year of his age. Mr. Lewis entered the service fifty-seven years ago, and was engaged in the active discharge of his duties until a few days before his death, —by which event the public has lost a most zealous and respected servant.

Testimonial to James Paget, Esq., F.R.S.—On Monday, 31st of May, a handsome cabinet of surgical instruments, the gift of more than seventy gentlemen, was presented to Mr. Paget, in the Collegiate Hall of St. Bartholomew's, to testify, on the occasion of his retirement from the wardenship of the College, their gratitude for his services, while they were residents in that establishment, and their admiration for the uniform ability and kindness with which he discharged the duties of his office. The following inscription, engraved in ivory, had been placed on the front of the cabinet:—"Presented to James Paget, F.R.S., in testimony of high regard and esteem by students who were resident in the College during the period of his wardenship. May, 1852."

Dr. Horatio Nelson Chipman has been appointed a member of the Legislative Council of the Bahama Islands.

Medical Benevolent College.—At a meeting of the Council, held at the Hanover-square Rooms on the 1st inst., the President (Earl Manvers) in the chair, the Earl of Carlisle was unanimously elected a Vice-President of the College. A vote of thanks was accorded to the Bishop of Ripon for having, on the 23rd ult., preached in aid of the funds, and also to the Rev. George Evezard for having kindly granted the use of his pulpit on that occasion. The Treasurer's Report was highly satisfactory, upwards of 1000*l.* having been subscribed since the last ordinary meeting of the Council.

The Militia Bill.—In the House of Commons, on the 27th inst., the following Petitions were presented on the subject of the Militia Bill:—By Mr. Thornely, for exemption of the University of London and Colleges connected therewith from the provisions of the Militia Bill; from Neesby Colleges, Sheffield and Taunton, St. Thomas's Hospital, Borough; lecturers of Westminster Hospital, Hull, and East Riding Schools of Medicine; physicians and surgeons of Northampton; Leeds School of Medicine; Queen's College and Manchester New College; two students of University College; professors of University College; Council of Huddersfield College; the Royal School of Medicine, Manchester; and Committee of Graduates, Manchester College, — to the same effect.

Liability of Hospitals to Rating. — In the Court of Exchequer, on Saturday last, in the case—the Governors of the Bedford Infirmary *v.* the Commissioners of the Bedford Improvements, Mr. Worlledge, on behalf of the Commissioners, contended, that the hospital did fall within the Act which rendered liable all halls, chapels, schools, almshouses, and all other public buildings, and embraced existing and all future erections. As to the mode of rating, he contended, that the building in question was rateable under the Act for the whole length of its frontage along a pathway, as well as that along a turnpike. Mr. Pearse, for the hospital authorities, submitted, that the Act should be limited to buildings *ejusdem generis*, and that a hospital did not come within that rule. As to the mode of rating, he denied the liability to be rated for the front along the footpath, and confined the liability along the turnpike to the width of the entrance-gates, the building in question standing within a large enclosed area. The Court was of opinion, that, on both points, their judgment ought to be in favour of the Commissioners; but, as they had rated the hospital for a part of its front along private property, as well as the turnpike and footpath, in respect of which there was certainly no liability, the judgment ought to be without costs.

Metropolitan Free Hospital.—Number of patients relieved during month of May. New patients, medical cases, 1169; surgical, 406. Total, 1575. Numbers in general attendance during the month, 4143.

Blenheim-Street Free Dispensary.—New patients during month of May. Medical, 404; surgical, 150. Total, 554. In general attendance during May, 2658.

Pathological Society of London. — At the last meeting of the Society for the present session, Cæsar Hawkins, Esq., President, in the chair, after the scientific business of the evening had been concluded, the President, in proroguing the meeting, congratulated the members on the success that had attended their efforts, and on the large number and the interesting nature of the pathological specimens that had been brought under their observation. He remarked, that a grand criterion of their success was the number of new members (41) during the session, being a great increase upon any previous year. He concluded by making the following statement as to the condition of their finances for 1851-52:—164 annual subscriptions, 172*l.* 4s.; 2 non-resident, 4*l.* 4s.; 37 entrance fees, 38*l.* 17s.; 2 arrears, 2*l.* 2s.; 2 life payments, 21*l.*; 1 payment for Transactions, 1*l.* 1s.: total receipts, 239*l.* 8s.

Mr. Sproull, Assistant-Surgeon Royal Navy, has been severely wounded in the engagement with the Burmese for the possession of Rangoon, and Dr. Davidson, of the 43rd regiment, has been killed in action with the Caffres. It is, nevertheless, said, that medical men, as non-combatants, incur no danger in actual warfare!

The Burmese War.—The following is the testimony borne by Rear-Admiral Austen to the conduct of our medical brethren in the Burmese war. He says: "I was an eye-witness to the indefatigable exertions of Dr. Minter, surgeon of the Fox, at the hospital on shore, and on board the Tubal Cain. Dr. Montgomery, superintending surgeon, expressed himself to me as being under the greatest obligations to him for his assistance. In addition to the duties performed by Dr. Minter at the hospital, he had those of his own ship to attend to, where the cholera had broken out with some virulence. Mr. Seccombe, assistant-surgeon of the Hermes, was also employed at the hospital on shore.

Mortality Notabilia.—The return for the week that ended May 29th is a proof of considerable improvement in the public health. The deaths registered in the second week of May were 1070, in the following week they declined to 943, and last week they fell to 883. In the ten weeks corresponding to last week of the years 1842-51 the average was 877, which, if raised in proportion to the increase of population, will be 965. The mortality of last week is therefore less than the calculated amount by 82. In comparing the results of the last two weeks it will be seen, that there is a decrease in zymotic diseases from 228 in the preceding return to 205 in the present, in diseases of the respiratory organs from 131 to 115, in tubercular diseases (including phthisis) from 189 to 177, in diseases of the nervous system from 120 to 104, and in those of the digestive organs from 59 to 50. Taking particular heads in the zymotic class, the cases in which hooping-cough was fatal declined from 42 in the previous week to 31 in the last, those of croup from 10 to 4, of typhus, etc., from 41 to 31. On the other hand, the mortality caused by small-pox, measles, scarlatina, diarrhœa, and erysipelas does not vary, or only to a trifling extent, in the two returns.

DEATHS *in the Metropolis for the week ending Saturday, May* 29, 1852.

Causes of Death.	May 29.				Sum of Ten Weeks.
	0	15	60	All Ages.	
All Causes	428	270	185	883	8774
Specified Causes	426	270	183	879	8720
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	152	37	16	205	1831
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	3	21	20	44	441
3. Tubercular Diseases	72	102	3	177	1864
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	42	27	35	104	1068
5. Diseases of the Heart and Blood-vessels	6	19	15	40	348
6. Diseases of the Lungs and of the other Organs of Respiration ...	62	20	33	115	1120
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	22	18	10	50	588
8. Diseases of the Kidneys, &c. ...	...	6	5	11	85
9. Childbirth, Diseases of the Uterus ...	...	9	...	9	98
10. Rheumatism, Diseases of the Bones, Joints, &c.	2	7	1	10	79
11. Diseases of the Skin, Cellular Tissue, &c.	...	...	...	...	20
12. Malformations	3	...	...	3	44
13. Premature Birth and Debility ...	30	...	...	30	211
14. Atrophy	20	...	...	20	148
15. Age	...	...	41	41	462
16. Sudden	2	2	1	5	85
17. Violence, Privation, Cold, and Intemperance	10	2	3	15	236
Causes not Specified	2	...	2	4	54

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In a case of dislocation of the sternal end of the clavicle backwards, I mentioned, that it remained unexplained, why, in that particular instance, dislocation took place rather than fracture. Moreover, I drew especial attention to the manner in which the accident happened, as it was extremely unusual. The dislocation has been produced (in all the cases I can refer to) either by a force thrusting the shoulder forwards, or by violence applied at, and thrusting backwards the inner end of the clavicle; whereas, in the present case, it was produced by a force applied at the middle of the bone. A "St. George's Student" has attempted to explain why, in this instance, dislocation took place rather than fracture (the common result of similar violence) by citing experiments proving the strength and elasticity of the clavicle. That this explanation is not the correct one we know by the fact, that fracture of the clavicle is one of the most common accidents, and that dislocation of the sternal end of the bone backwards is so rare as to be a surgical curiosity. Your Correspondent has also offered an explanation, that the horse's hoof (? shoe) might have covered the whole length of the bone, and have caused dislocation; but if he refers to the narrative of the case he will find that there is no evidence to prove that violence was applied to any other part but the middle of the bone.

I am, &c.

Middlesex Hospital. S. W. SIBLEY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Allow me to draw your attention, and, through the medium of your Journal, that of the Graduates' Committee of the University of London, to a point which I had expected to have seen noticed before.

In the proposed new Charter of the College of Physicians, it is provided, that all Doctors of Medicine, &c., practising as Physicians at the date of the Charter, shall be admitted as Licentiates of the College without examination; but no mention is made of Bachelors of Medicine. Is it, then, to follow, that all holding that degree from the University of London, and many of whom are at present practising as physicians, are to submit to an examination before they can be placed in a legal position; whilst a promiscuous crowd, holding a nominally higher degree, but who have never been subjected to half the test of competency which the former have, shall at once be admitted?

I hope, for the credit's sake of the framers of the Charter, that this omission has not been intentional. I am, &c.

Trinity-square, Southwark. JUSTITIA.

Mr. Benson is strongly recommended to emigrate, rather than, under his circumstances, to enter the Profession. He could possibly get a free passage out; and his funds, too small for this country, would be amply sufficient to found his fortunes in Australia.

A Surgeon.—Mr. Paget's valuable lectures will be published—partly in our Journal, and partly as a separate work.

Horace and Bistoury must apply at the Emigration Office.

Studens.—A Surgeon's diploma; published works and strong recommendations. Residence is not required.

Dr. Mackenzie's Case of "Farcy" is in the printer's hands.

J. T., Edinburgh, must authenticate his letter before publication.

Dr. Holdsworth.—Only by application at the College.

[To the Editor of the Medical Times and Gazette.]

SIR,—May I trouble you to inform me, in your Notices to Correspondents, whether, if a patient engages me to attend her in her confinement for a certain fee, and then sends for another medical man whose charge is less, without giving me any intimation of the same, I have any legal claim upon her for the said fee. I am, &c. A SUBSCRIBER.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the heading of my paper on Entropium, in the "Medical Times and Gazette" for the 22nd ult., there was a mistake in my titles, it having been implied, by an omission, that I am Surgeon to St. Mary's Hospital. I beg to correct the error. I am, &c.

H. HAYNES WALTON,
Surgeon to the Central London Ophthalmic Hospital; and
Assistant-Surgeon to St. Mary's Hospital.

55, Grosvenor-street.

Mr. Mitford's letter is transmitted to Mr. Yearsley, who will probably reply to it.

Inquisitor.—It is *possible* to acquire a knowledge of the practical use of the microscope by hard work, much reading, and great disappointments, without attending any *viva voce* instruction upon the subject. "Inquisitor" will, we think, have all his requirements satisfied by the careful study of a series of lectures commencing early in the next Volume of the "Medical Times and Gazette," by John Boon Hayes, Esq., Professor of Physiology in Sydenham College, Birmingham.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your last Number, Dr. Graves has noticed a mistake in reference to his own experience of the quinine treatment of continued fever, alluded to in the "Edinburgh Journal of Medicine," and which will, doubtless, have been a typographical error. As the following extract from Dr. Graves' letter on this subject was published by me in the May Number of the "London Journal of Medicine," Dr. Graves subsequently referred me, for the particulars of the cases, to Dr. Richard Kelly, Physician to the Drogheda Fever Hospital, whose letter was published at the same time, and which I also now subjoin. I am, &c.

ROBERT DUNDAS.

"Merrion-square, 22nd March, 1852.

"....At my desire, your quinine treatment of typhus has been tried in one of our hospitals, and with success. When I receive the notes of the cases, I shall not fail to let you know.

"To Dr. Dundas." "ROBERT S. GRAVES.

"Drogheda, 3rd April, 1852.

"With regard to your original treatment of typhus fever, I must acknowledge myself a convert, as I have treated eight cases of the most severe description with the happiest results.

"I shall, however, enter into details of one of the most severe cases under my care.

"A poor farmer, named Pentony, aged 55, was admitted into hospital 16th February; had been ten days previously ill. The pulse was 120; the tongue dry and brown; he had constant muttering delirium. The respirations were forty; the skin covered with maculæ; the temperature 90°. He had involuntary discharges, and subsultus tendinum.

"In two days after the administration of quinine (according to your directions) he was convalescent, and left the hospital in excellent health ten days after.

"In my opinion, such a happy result could not have been procured by any other treatment that I am aware of.

"In three of the fore-mentioned cases, four members of the families died in the houses from which my patients were removed; and, in one case, the patient had been afflicted with chronic bronchitis for years, but it did not militate against the treatment.

"Trusting that such an invaluable improvement may be adopted by the members of the Profession, and that my humble testimony may be of service in the trial of it. I remain, &c. "R. KELLY.

"To Dr. Dundas, Liverpool."

[To the Editor of the Medical Times and Gazette.]

SIR,—For twenty years I have been reading in the medical journals about reform, and colleges, and charters,—about Poor-law conventions, unrequited labour and professional non-prosperity; and for twenty years more (if I live so long) I shall continue to read the same story, and be of the same mind as I am now, viz., that the common-sense commercial maxim of supply and demand is the cause of the poverty of the Profession, and of the adoption of so much humhugging to gain a scanty livelihood. Your recommendation to the strong hacks to cut for the diggings, and to leave room at home for the rest, is of no use, so long as the colleges, universities, and faculties glut the market with their *protégés*. Supply and demand is as true in physic as in sugar; and what care the competing colleges about their men after the licence-money is paid?

The breed of doctors, surgeons, chemists, druggists, quacks, is each increasing, and now and then judiciously crossed, with much advantage to the person, and none to the Profession. This state of things is going on, and will go on, and has gone so far, as for you to recommend the diggings. Where I am, while the population is doubled, the medical men and druggists have increased five-fold. The adjoining district is the same. The colleges, to whom we paid our money, have caused this state of things; and what do they care? It would pay the Profession very well if most of the examiners were pensioned off or compensated. If there were only three licensing bodies; and, by raising the qualifications and fee, stop the glut of doctors. This glut lowers them personally and professionally; and so it will where the supply is above the demand. Free trade in physic would be all very well if the people could be a good judge of quality; but as they are not, their medicine is adulterated with ignorance and successful knavery; and if ignorance and successful knavery pay better than an honourable practice of the science of medicine—*ubi bene, ibi patria*—love the fat of the land—depend upon it, Sir, your sleek rosy rogue who laughs easily is "far better off than the respectable lean apothecary—he of the rueful countenance." I am, &c. M.R.C.S., L.A.C.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your Number of the 29th May contains the description and drawings of an apparatus for the reduction of dislocations, invented by Dr. Broxholme, and exhibited at the Medical Society. Though the apparatus is ingeniously contrived and well fitted for the purpose, yet the application of the screw to making the necessary extension in cases of luxation, was well known and commonly used by surgeons three hundred years since, as the following extract from Johnson's Translation of the Works of Ambrose Paré will prove:—

"Some Practitioners, instead of this pulley, make use of this described instrument, which they term 'Manuhrium Versatile,' or a hand-vice. The end thereof is fashioned like a gimblet, and is to be twined into a post. Within the handle lies a screw with a hooked end, whereto the string or ligature must be fastened. Now, the screw-rod or male-screw runs into the female by turning about of the handle, and thus the ligature is drawn as much as will suffice for the setting the dislocated bone."—Chap. vii., book 16.

An engraving of the apparatus is appended.

Yours, &c. A. WOLFF.

COMMUNICATIONS have been received from—

Dr. BELLINGHAM, of Dublin; Mr. BRANSBY COOPER, of Guy's Hospital, and Spring-gardens—LECTURES on HYDROCELE: Mr. FERGUSSON, of King's College, and George-street, Hanover-square—LECTURES on STRANGULATED HERNIA, and on FUNGUS of the TESTICLE; JUSTITIA; Mr. ROBERTS, of Rye—On the BALL and SOCKET FRACTURE-SWING; Dr. AYRES, of Portland-place, Wandsworth-road—REPLY to Dr. GRIFFITHS; Mr. BAKER, of the Board of Health Office; Dr. HOLDSWORTH, of Grove-house, Wakefield; SUBSCRIBER; Dr. MURPHY, of Sloane-street—OBSERVATIONS of CHAMP or SPASM; JUSTITIA, BISTOURY; Mr. HAYNES WALTON, of Grosvenor-street, Assistant-Surgeon to St. Mary's Hospital; Dr. BUNN, of Bristol; Dr. MACKENZIE, of Chester-place, Dr. TANNER, of Charlotte-street, Bedford-square; Dr. ESDAILE, of Perth; Dr. COTTLE, of Ryde, Isle of Wight; Dr. RIGBY, of Berkeley-square; Mr. BARLOW, of the Royal Institution; Mr. ALLSOPP, of Burton-on-Trent; Mr. DRUITT, of Curzon-street; Mr. SIBLEY, of the Middlesex Hospital; ONE of the COMMITTEE of the WALKER TESTIMONIAL FUND; Mr. WILLIAM BENSON; HORACE; A SURGEON; M.R.C.S. and L.A.C.; STUDENS; Mr. MITFORD, of Clifton; INQUISITOR; Mr. BARRY, of Great Alie-street, Whitechapel.

Dr. Snow Beck, F.R.S., etc.—A

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CLINICAL LECTURE

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By EDWARD STANLEY, Esq., F.R.S.

ON SCROFULOUS AND RHEUMATIC INFLAMMATION OF JOINTS.

Gentlemen,—The class of affections to which I propose to draw your attention this morning, has been adverted to by me on former occasions; but, inasmuch as it comprises diseases of common occurrence, and of the highest importance, it can scarcely be too often considered by the surgeon. Affections of the joints, indeed, and their lamentable consequences, whether resulting from neglect, unskilful treatment, or the inveterate nature of the complaint, are so repeatedly exemplified in the patients who apply at this hospital for relief, that I need offer no apology for describing maladies, a thorough knowledge of which is absolutely essential to the practitioner. In hospital practice, however, we seldom see the early stages of joint affections; patients come emaciated by long suffering, in whom the disease has advanced beyond the period for successful interference, in whom, possibly, disorganisation of the articular structures has commenced. In private practice, on the other hand, we are often called to treat these diseases at their outset; and it is with a view of rendering you acquainted with symptoms and phenomena of which the practice of a large hospital affords but few illustrations that I again lay the subject before you.

It cannot have escaped your notice, how frequently we encounter disease in some joints, how rarely in others; some, indeed, seem almost, and some entirely, exempted. Affections of the knee and hip-joints are daily seen; but seldom do we meet with disease in the joint of the lower jaw, or in the sterno-clavicular articulation. Again, the articulations between the heads of the ribs and the bodies of the vertebræ, and between the costal tubercles and the transverse processes of the vertebræ, seem to be never attacked by primary disease. At least, I am unacquainted with any morbid specimen in the museums, or with any instance in the records of pathology, exemplifying such an affection. These joints, I am aware, become involved in secondary mischief; disease commencing in the vertebræ may extend to them; but this constitutes another order of cases, an order to which my remarks are not applicable, and to which I do not refer. I speak not of implicated but of original disease; and I repeat, I am ignorant of any example illustrative of original disease in the joints which I have specified. It is asserted, that an explanation of the diverse liability of joints to disease,—the local predispositions of some, and the local immunities of others,—is to be found in their greater or less exposure to external influences; and that the knee is especially liable to disease, because especially exposed to such influences, both from situation and the thinness of its coverings. This explanation, however, is inadequate, for the hip-joint is surrounded by thick coverings of soft parts, and perhaps less exposed than any other; yet how frequently is it attacked! The ankle-joint, on the other hand, is thinly covered, and quite as much exposed as the knee; yet how rare, comparatively speaking, are its affections! Physiologists have stated, that joints are susceptible of disease in proportion to the activity of their functions,—that is to say, the more a joint is worked, the more likely is it to suffer impairment. Now, I apprehend, few joints are more exercised than that of the lower jaw; but we all know that few are more free from disease. Such a doctrine, moreover, involves a needless impeachment of the original integrity of the structure.

Rare, however, as disease of the temporo-maxillary articulation undoubtedly is, I exhibit to you two specimens of its occurrence. One (specimen 27 of the 2nd series of the Pathological Museum of St. Bartholomew's Hospital, vide Catalogue, Vol. I., p. 95) is the base of a skull, in the right glenoid cavity of which, ulceration, commencing in the surface, has extended both widely and deeply in the adjacent bone, and new bone is formed around the ulcerated surface. The other specimen (42, 2nd series, vide Catalogue) is a portion of the base of a skull, exhibiting partial absorption of the surface of the glenoid cavity, the effect of disease in the articulation of the lower jaw. Both these specimens were obtained from subjects brought into the dissecting-rooms; their history, therefore, is unknown; but they clearly demonstrate the existence of ulcerative disease for some time before death. There is a third specimen in the Museum, (1st series, sub-series a, p. 71 Catalogue,) in which, conjointly with ulceration in several parts of the cranium, there has been disease in one of the articulations of the lower jaw, producing absorption of the articular cartilage, with a deposit of bone in the circumference of the glenoid cavity. The corresponding condyle is in part removed by absorption." This, however, is an example of syphilitic disease.

In a late number of the *Medico-Chirurgical Review*, there is a notice of some cases recorded by Dr. Wernher,—examples of anchylosis between the upper and lower maxilla at different points. Some of these cases fell under the personal observation of the author, others are collected from pathological reports. Anchylosis is, as you are aware, of two kinds; either bony, resulting from osseous deposit, uniting one bone to another, as the tibia to the condyles of the femur, the neck of the femur to the acetabulum; or false, fibrous anchylosis, produced by inflammation within the joint, resulting in the adhesion of synovial surfaces; or by inflammation without the joint, producing thickening and condensation of tissues, by exudation of lymph. This latter form, since the introduction of chloroform, has been placed more under the control of the surgeon; for, with the aid of that narcotic, it is practicable to break down the adhesions by forcible flexion of the rigid member, and so to restore some degree of function to the joint. And here I would observe to you, that the tissues in and immediately around a joint are tissues of low vitality, not possessed in any great degree of the forces which withstand disease, or are able to repair its devastations. Although, when inflamed, they become acutely sensitive, in the natural state they are almost devoid of feeling. Relative to this point, the experiments of Bichât are particularly interesting; he discovered that the middle of a long bone possesses more sensibility than its articular ends, for injuries to the middle of the shaft in animals caused cries and evident indications of pain, while injuries to the articular ends caused little pain, and seemed to be but slightly regarded by the animal. These experiments I have repeated, and can confirm their results.

I now come to the consideration of strumous inflammation of joints, and, before proceeding to investigate its phenomena, the following questions demand attention:—1st. What are the circumstances which would lead us to regard the disease as strumous, when brought to the bedside of a patient? 2nd. In what condition should we expect to find the structures, viz., the bones, cartilages, and synovial membranes of a joint, provided the disease be strumous? With reference to the first question, I am unacquainted with any local symptom, any precise condition in the affected joint itself, which would enable us at once to decide on its strumous nature. We must look elsewhere. The age and aspect of the patient, the past or present existence of scrofulous disease in other parts, such as enlargement, and suppuration of the cervical absorbent glands, strumous ophthalmia, tubercle in the lungs or others organs,—any of these, especially if actually co-existent, would justify us in regarding the disease as scrofulous. Often, indeed, these cases are obscure, and sometimes we are led to a wrong conclusion. The aspect of the patient is delusive, and should not be too much relied upon. Many instances occur in which the patient's appearance seems indicative of the existence of scrofula, whose subsequent progress and favourable recovery prove that such evidence is fallacious.

We have now to answer the second question. What is the state of a joint invaded by strumous disease? The morbid specimen I now exhibit shows the condition of the articular extremity of a bone in an extreme attack of this nature. The end of the bone is softened from absorption of its earthy matter, and its cancelli are filled with tuberculous deposit. It is, however, according to my experience, rare to meet with so complete an example of strumous disease as this specimen furnishes. In the majority of cases, I believe that no tubercular matter is found deposited, and, when found, it is only in the last stages of the affection. Such a condition of bone, when it does exist, is, in my opinion, irreparable; and, when the surgeon is summoned to a case exemplifying the disease in this its latest stage, he can do nothing to restore the bone to its natural state, nothing to accomplish a cure. There is, however, an earlier stage in these affections, which you will often have to treat in private, although it is seldom seen in

hospital practice—a stage amenable to treatment, a stage in which, generally speaking, the morbid impairment of the bone may be arrested, and its integrity restored. It is characterised by increased heat, and enlargement of the bone immediately above the joint. There is, indeed, increased vascularity, and low inflammation of the bone, which is quickly followed by expansion of the cancellous texture, and absorption of earthy matter. Ultimately, in bone thus degenerated, tubercle is sometimes deposited. Such, then, is the state of the bone in a joint affected with struma. The other structures,—the cartilages, synovial membrane, etc., are in a state of low inflammation,—inflammation which has commenced either in the bone or the synovial membrane itself, and which, if suffered to advance, is followed by its usual consequences,—exudation, thickening of tissues, and sometimes suppuration. Now, the appropriate treatment for an attack of this sort is, perfect rest for the limb, and removal of all weight and pressure from the inflamed joint, so as to insure, as far as possible, its complete tranquillity. If inflammation exists in any activity, the judicious application of leeches will be beneficial; but it should be borne in mind that leeches must not be lavishly employed, as strumous patients cannot stand depletion. The remainder of the treatment is constitutional, and should be directed to the restoration of the general health, if that has failed; to its maintenance, if it has not. To this end country air, or, where it is practicable, a resort to the sea-side should be recommended; a light, nutritious diet enjoined, and the state of the stomach and bowels be carefully attended to. The following particulars of a case which occurred to me some years ago, illustrate forcibly the truth of my observation, that the articular ends of bones rarely become the seats of tubercular deposition, even in well-marked examples of strumous disease.

A boy, ten years old, was under my care for scrofulous enlargement and suppuration of the cervical glands. While in the hospital, hip-disease supervened, evidently of strumous character, which ultimately wore out the patient. Examination of the body showed, that the joint was disorganised; the soft tissues around were infiltrated with tubercular deposit; the capsule and articular cartilages partially destroyed by ulceration; the bone was dislocated on the dorsum ilii; the acetabulum widened, and containing tubercular matter. The mesenteric and other absorbent glands were infiltrated with tubercle. Tubercular ulceration was present in the intestinal canal. However, when a longitudinal section of the head of the femur had been made, no tubercular deposit was found in the interior of the bone. Absorption of earthy matter, and widening of the cancelli, had taken place, but no interstitial tubercle existed.

Not infrequently disease in the soft tissues around a joint, inflammation, and abscess, are mistaken for disease inside the joint; and, in some instances, eminent surgeons have amputated limbs under the impression that an irremediable articular affection existed, while, in reality, the exterior tissues alone were involved, the joint itself being sound.

Joints are liable to another form of inflammation, differing from that which we have just reviewed,—"rheumatic inflammation." Examples of this disease occur generally in combination with rheumatic fever, and are therefore more prevalent in the medical than in the surgical wards of the hospital. The diagnosis of articular rheumatism is not usually difficult. When rheumatic fever is present, it is, of course, obvious; but when it is not, the implication of other joints, the cause and symptoms of the attack, and the history of prior rheumatism, will generally guide us to a right decision. The implication of other joints, because it is extremely rare to find rheumatism affecting one joint only. It attacks two or three simultaneously, or flies about from one to another. The cause and symptoms of the attack,—because we shall almost invariably find that the patient has been exposed to cold, or dampness, and because muscular pains are generally precursory to the articular inflammation. Rheumatic disease thus induced, is commonly marked by pain in one particular spot; the patient does not complain of general pain in the joint, but points to one especial locality, and describes it as the seat of all his sufferings.

Articular rheumatism is, moreover, intractable, leaving one joint and assailing another, or departing and recurring in the same joint. Joints are attacked by rheumatic inflammation in two ways: either their fibrous structures, their ligaments suffer, or their synovial membranes. Now, the consequences of rheumatic inflammation of the ligaments may be serious, such, indeed, as may terminate in dislocation of the bones of a joint. For, under its influence, the ligaments become soft and elongated, so as to permit the bone to slip out of the cavity in which it is naturally fixed. In this way the head of the femur may be displaced upwards on the dorsum ilii without rupture or ulceration of either the capsule or the ligamentum teres. An example of such an occurrence happened some years ago in the practice of Mr. Lloyd.

A painter, in the enjoyment of good average health, was in the habit each morning of taking a warm-bath. After having done so on one occasion, he experienced a pain in the hip-joint, one of the joints of the fingers also became swollen and inflamed. He consulted a medical man, who gave him hopes of speedy recovery. Nevertheless, he remained in bed five weeks, after which, the pain having subsided, he was told to get up: this he found himself totally unable to do, and, on examination, the limb was found to be shortened and inverted, the head of the bone having been dislocated on the dorsum ilii.

A case has also been related to me by Dr. Latham, in which articular rheumatism of long continuance produced dislocation. Some years ago, a young woman was in the hospital, under the care of Mr. Lawrence, suffering from rheumatism in the hip and wrist joints. She was confined for some time to her bed, and when permitted at length to get up found that she was lame, and that the lameness grew gradually worse. After a while she experienced a sensation as if the bone slipped from the socket when she walked. On examination, the limb was found of natural length, and its movements complete; rotation, however, was remarkably free; and when the thigh had been flexed on the pelvis, and was then rotated, the head of the bone could be evidently felt to pass over the brim of the acetabulum.

Cases like these illustrate the unusual results of a very common affection, which, although often obstinate and tenacious of existence, generally terminates well, leaving an unimpaired joint behind.

Rheumatic synovitis commonly ends in effusion. Ulceration of the articular cartilages may, however, supervene; and I have witnessed a case in which this condition was set up within nine weeks from the commencement of the attack, so that it was found necessary to amputate the limb. More usually, however, rheumatic synovitis gives rise to anchylosis, such anchylosis as may result from the adhesion of opposite synovial surfaces by effusion of fibrin, and which, as I have explained in an early part of the lecture, is called spurious, in contradistinction to true or osseous anchylosis.

Gonorrhœal rheumatism is a form of the disease occurring in conjunction with gonorrhœa, brought on by exposure to the vicissitudes of weather, and to the development of which, a certain unhealthy constitutional state appears necessary. Unlike ordinary rheumatism, it confines itself to one or two joints, and unshifting, clings to them with remarkable tenacity. It is, in truth, an affection that has long baffled the powers of medical surgery. In many instances the patients appear to recover, but the complaint returns on the slightest exposure, and no permanent cure is effected. There is now under my care, in Lazarus, a Pole suffering from gonorrhœal rheumatism of the wrist joint. In him the disease has yielded for the present to three grain doses of the iodide of potassium, given three times daily; and, I am informed, that the gonorrhœal discharge, which had become scanty, has re-appeared since the mitigation of the articular disease. The best possible termination in these cases,—a termination which has ensued in the instance I have mentioned, is serous effusion into the joint; for when the fluid is absorbed, it is not unlikely a useful joint may remain. Some time back, a young man, aged twenty-one, was my patient in the hospital, in consequence of almost acute attack of rheumatism in the shoulder-joint, following gonorrhœa. Though he was in a reduced state, I ordered him to be bled from the arm; mercury was administered; in fact, very active treatment was adopted. Serous effusion into the joint resulted, and within five weeks I had the gratification of seeing him leave the hospital with the functions of the joint in a great measure restored.

We occasionally meet with examples of rheumatic synovitis, occurring after parturition, which may originate anchylosis. The affection differs in no shape from ordinary rheumatic synovitis; but it requires gentle treatment, as the patients attacked by it are generally much debilitated, and frequently suffering from some uterine complication.

ORIGINAL COMMUNICATIONS.

SOME GENERAL OBSERVATIONS ON FATTY DEGENERATION.

By WILLIAM FREDERICK BARLOW, M.R.C.S.

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[Read partly before the Medical Society of London, March 20, 1852.]

[Concluded from page 493.]

But now let us proceed to the consideration of those *local* obstructions to the circulation, which occasionally constitute that true, although partial anæmia, whereunto succeed atrophy and, by no means uncommonly, fatty degeneration. The coronary artery may be so obstructed as to lead to *local* fatty degeneration of the heart,—a fact already most fully and clearly illustrated by Dr. Quain.(a) Softening of the brain has often been found connected with, and rightly considered consequent upon, a narrowing of the arteries leading to the affected part; and there can be no doubt that, generally speaking, arrestations or diminutions of the current of blood, wherever they may happen, lead to atrophy and decay. Impaired nutrition of the lower extremities has been traced to congenital constriction of the aorta. The size of parts may, to a certain extent, be figured by the diameters of the vessels leading to them, although remarkable exceptions to this exist, which are readily explained by physiology.

Mr. Simon has made the observation, that partial atrophy and softening of the kidney may be traced sometimes to the blocking up or obstruction of a small artery.

In one case, he noted a vessel of this kind "blocked completely with an atheromatous and fibrinous mass, which had probably been carried into it from some larger trunk, and had thoroughly arrested the passage of blood there."(b)

The condition of the vessels in regard to the whole question of atrophy and degeneration needs a more methodical treatment than it has yet received; it can only be glanced at here. Occasionally, we find a branch of an artery so obviously occluded, and the part it supplies so exclusively degenerated, that no doubt remains about the impairing or withering influence it has exercised. But local degeneration may occur from obstructions occurring in vessels not easily traced, nay, of those which are of quite microscopic minuteness, such, for instance, as those of the brain, described and figured by Mr. Paget as degenerated in apoplexy.(c) Nor does it follow, that the small blood-vessels should be healthy, because the large ones appear quite untouched. In several cases of ramollissement of the brain, I have observed the most obvious degeneration of the minute, when there was none observable in the larger vessels; but it will be often quite impossible to say how much is due to the state of the vessels, how much to the condition of the blood itself, and how much to the defective assimilation of tissues; the latter has often most undoubtedly a large share in the process of destructive conversion.

An artery is sometimes found to diminish from the disuse or paralysis of its field of distribution; and the lessening of its size may become, in some instances, a serious bar to the recovery of a part which needs all auxiliaries to the restoration of its pristine state of nutrition.

The effect of the obstruction, or narrowing of vessels, is much modified by various circumstances. The consequence of the diminished calibre of a vessel may be fully counteracted by the compensatory enlargement of other channels; but if there exists, as frequently happens, a diseased state of the neighbouring artery, or branches of arteries, nature may be foiled in any effort to carry on the circulation with effect.(d) Portal refers to a case of apoplexy, in connexion with which there was discovered so great an ossification of the right internal carotid that scarcely any blood could have found way through the channel; but the vertebral of the same side was three times bigger than its fellow, and had, doubtless, supplied parts which would have perished but for its enlargement. But the heart is deprived, by an anatomical peculiarity, of the establishment of a collateral circulation in cases of obstruction of the coronary artery,—a fact which has not escaped Dr. Quain, who cites, in his Memoir, Mr. Swan's observation, that there is no communication between the branches of that vessel, and points out the necessary consequence resulting in cases of local degeneration dependent on their being blocked up or narrowed. The like peculiarity of the pulmonary circulation has been noticed by Mr. Paget in his observations on obstructions of the branches of the pulmonary artery. "From the arrangement of the pulmonary arteries, between which there is no anastomosis except in their capillaries and smaller branches, it results that, whenever the flow of blood through the capillaries of any part of a lung is prevented, there must also be a stagnation of blood in all the branches from which those capillaries are derived; and in those circumstances the blood coagulates in the vessels, and passes through various changes."(a)

But the collateral and effectual supply of the brain and other parts in cases wherein their blood-channels are diminished, is, of course, entirely contingent. If the arteries in the neighbourhood of the diseased spot happen to be healthy, the exigency of the situation may be met; but the degeneration of vessels may be so extensive, that the conservative influence of anastamosis is wanting, and the part which is supplied by the obstructed vessel perishes as a consequence. The success of the ligature of the carotid artery must be greatly modified by the general condition of the cerebral bloodvessels, both large and small. It may be impossible adequately to re-establish the circulation through fresh channels, in consequence of their diseased or degenerated state; and the brain may be so impaired in nutrition, that any impediment to its circulation may lead quickly to softening. It was stated by Mr. Hodgson, at a recent meeting of the Royal Medical and Chirurgical Society, that, in the great majority of cases wherein ramollissement had followed the tying of the carotid artery, the patients had passed the middle age of life; and one, seeing what recent researches have taught us, may be pardoned a speculation on the probable condition of the bloodvessels of those persons, and their influence on the issue of their cases. The small bloodvessels of the brain, as well as the large, might have been more or less affected by degeneration. Aneurism of the larger arteries is frequently associated with other aneurisms. Degeneration of the heart and bloodvessels generally may be looked for reasonably in aneurismal subjects. In the case of an abdominal aneurism, which I have laid before the Pathological Society, occurring in a woman twenty-nine years old, there was found a heart degenerated into fat, and a circumscribed softening in the cerebellum, the small bloodvessels in its neighbourhood presenting distinct clusters of fat granules in their coats.

In applying observations made upon the ligature of the arteries of animals to the treatment of aneurism in the human subject, it must never be forgotten that, in the case of experiment, we operate in a condition of health. If a part be degenerated, and all its vessels more or less diseased, the artery leading to it cannot, of course, be ligatured so safely as under the favourable circumstance of perfect nutrition.

That there were local causes which would greatly modify and interfere with the circulation of the blood was well known to, and insisted on by, its famous discoverer;(b)

(a) "Medico-Chirurgical Transactions," Vol. XXXIII.

(b) *Op. cit.*, p. 94.

(c) *Medical Gazette*, 1850; see also a subsequent communication by the writer in the same journal for 1851.

(d) The serpentine convolutions which arteries are wont to make when they enlarge, are admirably described by Dr. William Hunter:—"The coats of arteries are elastic, and therefore whatever distends must, at the same time, lengthen them, and thereby produce serpentine turns. I observe that this happens constantly in injecting the vessels of dead bodies; and I have often had opportunities of observing the same thing happen from the stroke of the heart in the arteries of living animals. In the snake or viper it is very apparent in an artery that runs along the outside of the lungs, which is thrown into serpentine windings every time that it is dilated by the action of the heart." He further refers to the aorta of a woman, which, "from being enlarged, had become so long that it could not run straight down the back as usual, but made gentle windings all the way." Arterial changes like these cannot, of course, happen where the vessels are made rigid by degeneration, or are so weakened at certain points that aneurism is the consequence of the blood's impulse. See "Medical Observations and Inquiries;" or Mr. Erichsen's Collection of Observations on Aneurism," published by the Sydenham Society, p. 169.

(a) "Medico-Chirurgical Transactions," Vol. XXVII., p. 163.

(b) I shall cite the passage to which I here refer. Let us apply what he says of obstructed circulation to cases of atrophy, degeneration, softening, and what he observes of the altered consistency of the blood to the changed condition of that fluid which we have had too ample opportunities of examining in cholera:—"Veruntamen exinde manifestum est sanguinem, in suo circuitu, non eadem velocitate et celeritate ubique transire: ut neque eadem vehementia, in omnibus locis et partibus et temporibus, sed pro ætate, sexu, temperie, habitu corporis, cæterisque rebus contingentibus, internis vel externis, naturalibus vel non naturalibus multum variari. Non enim per vias et mæandros occlusos, obstructos aut impeditos, eadem celeritate transit, qua per apertos, reseratos, et patentes; neque per corpora

and what may be effected by these, we see well exemplified in that general degeneration of the arterial system into which fatty conversion largely enters. But study that extensive degeneration as we will, we can never behold it as it fully exists. What! though we begin with the aorta itself, and thence trace the blood-vessels to every organ, and follow them into each, so far as we are able, and scrutinize their coats with curious attention, and, with regard to the vessels of the brain, do more, and, by microscopical assistance, bring the remotest of them into clearest view, and mark their degenerations, dilatations, and the state of their surrounding tissue, selecting them from various parts of that wide-spread and intricate vascular mesh which intervenes between the great arteries and veins of the organ, and comparing them diligently as to their different appearances, we shall, notwithstanding, be obliged to leave unexplored the great mass of blood-channels, even in this structure: and what, we may ask, is the state of the small arteries and veins of the heart, the lungs, the liver, the kidneys,—what, in a word, is the minute pathology of all the blood-vessels of every part? It is often hard, nay, impossible, to say, whether a vessel leading to a softened part have degenerated with or before it, and especially in old age and chronic maladies, in which, frequently, the blood, and its vessels, and the places it flows to, may be held to decline simultaneously. How, for example, can we sometimes say whether the arcus senilis be really an effect, or simply an association of that atheromatous condition of the ophthalmic artery which Mr. Canton has found to be connected with it. Much might be said if the corneæ and their arteries were exclusively degenerated,—more, if one arcus senilis only were found, and one ophthalmic artery only affected; but the adipose arc or circle is connected commonly with a diffuse, all-pervading evidence of decay. Yet, in cases even of the most general kind, we shall still find local modifications; here and there vessels will be perceived unusually obstructed, and, moreover, at the express points of lesions, which are far in advance of the general decay. May not the fawn-coloured patches which significantly mottle the degenerated heart, be each, in some instances, owing to obstruction of its own appropriate arterial branch or minute ramifications? May not the circumscribed diffused softenings, occasionally seen in capillary apoplexy, be centres of an extreme vascular degeneration? The true relation of a vessel to the atrophy, wasting, and death of a part, can be known only by completely tracing it throughout its course. Anæmia of the brain may, as Rokitansky reminds us, be produced by degeneration at the aortic orifices of the cerebral blood-vessels,(a) and, though the whole length of them seem free from disease, so far as the unaided eye can reach, the microscope may find their terminal channels more or less fatty or calcareous.

It seems to me, that the state of the minute circulation has not been at all sufficiently considered in reference to the softening and destruction of parts. It has been inferred, in some cases of ramollissement of the brain, that the obstruction of the artery leading immediately to the destroyed part has been the direct cause of its death; but the only support of this position is to be found in the existence of a coagulum of blood in that artery. It is my belief, that in many cases of local death, not of the brain only, but other parts, the obstruction of the artery, or branch of artery, leading directly to the mortified spot, has been the consequence, and not the cause, of the affection. That the occlusion of the ramifications of an arterial trunk may arrest the blood in its onward course, and lead to its coagulation, is too clear to be insisted on. The mortification of a limb would necessarily impede the main artery and its branches, and fill them with coagula. More limited impediments would, of course, produce more restricted effects. Mr. Paget tells us, in his observations on obstruction of the pulmonary artery, that the branches which run to an inflamed spot of lung may become filled with coagulated blood; and, in like manner, a gangrenous part may obstruct the vessels which once nourished it. These remarks refer exclusively to cases in which the large arteries are found simply blocked up, and not to those, I need hardly say, in which they have been evidently a long time narrowed, perhaps almost occluded, in consequence of degeneration.(a)

III. *The influence of the nervous system* being most closely related to nutrition itself, must be considered in reference to its failures; and it must be regarded under the separate heads of withdrawal and derangement. Parts waste in paralysis; and we may be quite certain, that, in the general impairment of functions in old age, the wasting and degeneration of various structures are often heightened by that disease of parts which results from the growing lethargy of the mind. To what Mr. Paget and others have remarked of the local consequences of the partial withdrawal of nervous influence, I have nothing to add; but I cannot pass over, however difficult the subject may be, the question of the disturbances and losses of nutrition effected by various conditions of the mind. How hard to define the measure of their mischief, and yet how easy to perceive that it is vast! The state of the mind often injures nutrition, in an indirect manner, by withdrawing the body from those exercises and diversions which constitute main sources of its vigour; by depressing the heart's action, so that the blood is circulated with insufficient frequency and force; by modifying the respiration so extremely, that the oxygenization of the blood is less perfect than it should be; by seriously interfering with the digestive function, the disorders of which spread through the body; and oftentimes by banishing or breaking the sleep, "chief nourisher in life's feast."(b) It cannot but be concluded, from a variety of considerations, that growth, nutrition, reparation, and decay, are extremely affected by the conditions of the mind. Practically, men act as if they were so; and the great students and expounders of human nature have drawn most terrible and striking pictures of the body withering from sorrow or despair. All ages and stations testify to their truth. Youth may anticipate both the toil of mind and the cares of manhood,

> "Ante annos animumque gerens curamque virilem;"

but it is on the aged, the atrophied, the partly degenerated, that the depressing passions tell most fearfully. We cannot graduate their degrees of effect as we can measure those of heat by a thermometer: but shall we doubt their existence, because we cannot weigh their consequences in an unerring balance? We must reflect delicately on the subject of life. The best thoughts on this matter are too subtle for expression. Eloquently as Bichât wrote, he left, doubtless, much unwritten which he felt was true; and many of Hunter's greatest thoughts came, probably, when he was busily dissecting, and fled with the moment. Each transient emotion which affects the breathing, or agitates the heart, alters nutrition everywhere. Vast, then, must be the sum of such influences, to say nothing of passions which rage terribly, of griefs which time cures not, throughout a life-time never safe from emotion, no, not even in sleep! Vast the effect of some master-passion, which, concealed or visible, withers the body by its ceaseless tumult, recalling, it may be, to the minds of many, that noble passage of our famous Dryden, wherein he paints—

> "A fiery soul, which, working out its way,
> Fretted the pigmy body to decay,
> And o'er informed the tenement of clay."(c)

The plant is exempted from a multitude of sources of deranged nutrition, which are quite restricted to a higher life. It may be checked in its growth, its flowering, its fructifying, by various agencies material in their kind; it may be killed by cold, or destroyed by blight, or wither from the ungenial nature of its soil,—may be exposed to the changes and tempests of the air; but it is free from all mental vicissitudes and storms. And certain we are that the existence

aut partes densas, constrictas, infarctas, uti per raras, relaxatas et de obstructas. Neque cum debiliter, lente, et molliter sit impulsus, ita expedite procurrit aut penetrat, uti cum vi aut rohore impingitur, vehementia et copia cogitur. Neque crassus ipse sanguis, aut solidior, aut terrestior factus, adeo penetrativus, uti cum serosior, attenuatus, liquidior existit."—*Gulielmi Harvei Opera Omnia a Collegio Medicorum Londinensi Edita*, p. 128.

(a) Translation of Rokitansky's Pathological Anatomy, Sydenham Society's edition, p. 885.

(a) Dr. Marshall Hall, as I learn from conversation with him, takes the view here stated, of the manner in which the larger vessels *may* become obstructed.—(See a note in his Croonian Lectures, delivered in 1851, p. 88.) In watching with Dr. Hall the circulation of the blood in the web of the frog, I have had frequent opportunities of seeing how many causes may modify its flow through arteries, veins, and capillaries. Perhaps we can never truly feel all the importance of a free and sufficient circulation to a part, unless we observe carefully the wonderful scene of the blood traversing the minute vessels, as shown by the microscope. The circulation, as beheld in the toad's lung, is splendid and striking beyond description.

(b) We term sleep a death, and yet it is waking that kills us, and destroys those spirits that are the house of life."—*Sir Thomas Browne.*

Sydenham emphatically says:—"Etenim post venæ sectionem et catharsin nihil æque naturæ vires subruit ac noctu vigilare."—*De Podagra.*

(c) Absalom and Architophel. On many matters relative to the connexion between mind and body, not a few of us, conscious that we may fail in expression, turn to the great masters of our noble language, whether they have written in poetry or prose.

of man is often shortened by the adversities of his fortune, or the unhappy constitution or management of his mind; nor is the general opinion held on this point to be set down coolly amongst "vulgar errors." His life is formed by the combination of processes which, times and often, mingle together, and are lost in each other, as wave in wave; they cannot be compared to a number of lines placed parallel, with intervening spaces, so that all may be seen with great distinctness; nor yet to a web, such as that of the spider, in which the threads, though arranged more complexly, can all be most clearly and easily traced; but they are rather to be likened to the mingling of colours, whereby effects are caused, whereunto we perceive certain tints are essential, though we fail to discover those exact proportions which are known only to the artist who has mingled them. And so in disease,—we know often the causes, or many of the causes, which are working for death, and incessantly spoiling the wonderful structures; and yet fail of assigning, with anything approaching geometrical precision, their true parts to each; they all work together so simultaneously, and with such mutual aid, the body lowering the energies of the mind, and the mind impairing the strength of the body, that we can only speak of the *relative* influence of the destroying powers as of a matter of probability; but, here great judgment may be shown, and high evidence of reason and knowledge; nor must we refrain from treating of problems because they are complex; for the whole great question of life and death might well be abandoned on this very ground.

That emotion has no less direct an action in producing secretion than in causing spasm, is plain enough. Some criminals have cried that their judges may be affected, having, as many persons have, the power of "crying at will." A strong emotion raised by desire acts similarly to that which comes in spite of us, and cannot be subdued. It is not directly by the will, but through emotion, as Dr. Carpenter observes, that the lachrymal secretion is really excited; and I know from experiment that this is true.(a) In the same manner, we can act on the heart's action, not voluntarily, but by exciting some strong feeling or other of the mind. Idiots, imbecile and weak persons, are proverbially given to tears, and they are also peculiarly prone to involuntary muscular action; and the emotion of dreams has peculiar power, not only over the secretions, but the muscles also, for the will interferes not with it. Effects of the influence of true emotion we see every day; states of the salivary, mammary, menstrual, hepatic, and renal secretions, are no equivocal witnesses of its power; and, certainly, the reparation of accidents and operations is much influenced by the mind, and, I think, directly; if the secretory processes be thus affected by it, why should not those of nutrition and repair? The effects of mental attention on the bodily organs have been treated of expressly by Dr. Holland;(b) but, with regard to some of these, it is hard to say that they are really consequences of *pure* attention. However this be, *attention* fixed on organs diseased or disturbed in function, has often the worst influence. At the time the physician would have the heart of a patient equally beating, it is frequently thrown into irregular and violent action by the mere circumstance of the *attention*, unassociated, it may be, with *conscious* emotion, being fixed upon it; and it has often struck me, that profound sleep would be the best time for ascertaining some conditions of the organ.

Lallemand, Rostan, and other writers, count grief among the causes of ramollissement; and it is very easy to conceive a part already weak in power of assimilation, and just able to maintain its life, perishing quickly from that general weakening of the vital functions which sorrow or over-occupation may produce; or "from the disturbance of the nervous force indirectly interfering with the process of nutrition, inasmuch as this force exercises always some influence on the nutrition of each part, and is (as one may say) one among the plasturgic forces."(c)

Occupation, as well as emotion of mind, must be considered in reference to atrophy and its results. That the nutrition of the brain and other organs may be most seriously impaired by over-study is beyond question. But most employments of the mind imply emotion, though it more predominate in some cases than others; the school of arithmetic and the world of politics act, of course, very differently. Dr. Forbes Winslow has written a monograph on "softening of the brain arising from anxiety and undue mental exercise;" and there can be no doubt that, in many instances, threatened softening is only to be averted by an instant retreat from the toils of business, from anxiety I dare not say, for from this there is, too frequently, no refuge. But many cases of incipient ramollissement have been mistreated by everything that favours atrophy,—by low diet, blood-letting, and unsparing mercurials,—and so nature, already exhausted to the utmost, has been exhausted more.(a)

The instances referred to are those happening at a late period,—instances, some of them, of pure degeneration or local death. But there is no season, save that of infancy and the dawn of childhood, which is secure from the atrophy of mental toil, the excess of which has often, no doubt, hastened death greatly. Southey, speaking of Kirke White, plainly says: "Cambridge finished him." "Peace has her victories no less than war," and, like war, she has her deaths also. Pale students pine in miserable garrets, and die of atrophy. But the saddest of all the instances of defective nourishment, and the ills it leads to, is that produced in earliest youth, or childhood even, by, what is termed courteously, "education." To hear a pale, languid, spiritless boy recite long passages from Virgil, with a tone of monotony never relieved, and an emphasis ever in the wrong place, can only give pleasure to those of his mistaken relatives or friends who seem to think that it takes not less genius to remember the Æneid than it did to compose it.

As to the mischief of attempting to "force" the intelligence, much as plants are forced often in hot-beds, I may well cite the high authority of Dr. Holland. "We find, in Quintilian, a writer ever of sound and enlightened judgment, many valuable precepts as to the cultivation of memory, and an earnest reprehension of attempts at a premature development of this or other faculties. The phrase he applies to such precocious growths, 'Inanibus aristis ante messem flavescunt,' has its exact counterpart in Lord Bacon's description of 'that over-early ripeness in years which fadeth betimes.'

"In the course of my practice I have seen some striking and melancholy instances of the exhaustion of the youthful mind by this over-exercise of its faculties. In two of these, unattended with paralytic affection, or other obvious bodily disorder than a certain sluggishness in the natural functions, the torpor of mind approached almost to imbecility. Yet here there had before been acute intellect with great sensibility; but these qualities forced by emulation into excess of exercise without due intervals of respite and with habitual deficiency of sleep."(b) Exercise is, no doubt, the power of the mind; but, when carried perpetually to the pitch of exhaustion, the brain may become damaged, perhaps irreparably, and the mediocrity of manhood forms a painful contrast with the brilliancy of youth, and the decline of the faculties comes long before its time.

(a) See Dr. Carpenter's article "Secretion," in Dr. Todd's "Cyclopædia." That many diseases become extraordinarily aggravated by conditions of the mind, has been long known to our greatest observers. Sydenham, speaking of the treatment of gout, observes: "Quinimo animi tranquillitas omni ope stabilienda est," etc.—Opera Omnia. Edition of Sydenham Society, p. 439. The proneness to infection produced by fear and anxiety also bears upon this question of the effects of nervous influence on nutrition.

(b) "Medical Notes and Reflections."

(c) "Lectures on Inflammation," p. 55, by James Paget.

ON THE RECENT DEATH FROM CHLOROFORM.

By J. CHITTY CLENDON, Esq., M.R.C.S.
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Death from chloroform, and in the presence, too, of distinguished surgeons, is an event which cannot fail to shake the confidence of the Profession and the public in this important anæsthetic agent, and to induce much hesitation on

(a) Dr. Quain observed, in the discussion which followed the reading of this paper, that "the relation of the mind to the disease of the heart in question (fatty degeneration) was one of great interest. It had happened to him to have met with several cases of degeneration of this organ in individuals who had suffered much mental anxiety. In three cases the degeneration was such as to have led to rupture of the heart; such individuals may be said literally to have died of a broken heart." Emotion may, by frequently disturbing this organ when degenerated, add greatly to the exhaustion of its action, and yet more lower its nutrition, and all to its degeneration correspondingly. Again, the heart, enfeebled by degeneration, impairs the nutrition of the body generally, and the latter re-acts upon it; and, however simple the process of decay, the complexity of its causes is often extreme.

(b) "Chapters in Mental Physiology," p. 138.

the part of those who daily administer it. It seems, therefore, the duty of all whose attention has been directed to the subject, to put forward, for the consideration of themselves and their brethren, any observations which their experience may suggest as to the course most proper to be adopted on a question of so much moment.

A great majority of the cases hitherto reported as fatal, have occurred on the Continent, or in the provinces; few, if any, have come under our own observation; and, while opponents have not failed to ascribe death, in each recorded instance, to chloroform, its advocates, on the other hand, have invariably attributed it to some latent organic disease; to want of tact and experience on the part of the practitioner; to the impurity of the chloroform, or to some error in the mode of administering it. From the clear and circumstantial account furnished, the present case seems to admit of none of these objections, for the patient had, a few days previously, been under its influence for a lengthened period without suffering the least inconvenience. Exactly the same chloroform was used on the second occasion as on the first, and the gentleman who administered it had had considerable experience in its use. The partial success which attended the several efforts to restore animation, would also tend to the belief that death resulted from functional disturbance, not from a morbid condition of any vital organ. Taking, therefore, the case as reported, without knowing what a *post-mortem* examination may reveal, I think there can be no doubt that death, in this instance, was attributable to chloroform.

Now, if we admit that death *may* occur from chloroform, in a case where every care and precaution are taken, and where the patient is, to all appearance, healthy, it becomes a most important question, Are we justified in using it at all? This, it appears to me, is a point on which some authoritative decision should, if possible, be obtained, and which ought not to be left to individual will or individual responsibility.

Some two or three years since, a death, supposed to be from chloroform, occurred at Boulogne, on which the French Government immediately instituted a medical inquiry; but in this country we cannot expect Government interference, nor, consequently, any decision having the force of law. Yet, I think, if a Committee could be formed of leading members of the Profession, to examine into and maturely weigh all the evidence for and against chloroform, the propriety of continuing its use, and the safest manner of using it, the deliberate opinion of such a body must have great weight with all classes of the community, would greatly reassure the individual practitioner, and could hardly fail to lead, in many instances, to an improved method of administering it. To select unbiassed judges might seem a work of some difficulty; yet, I think, such a Committee might be formed, of gentlemen already in office by the choice of their medical brethren, namely, the Presidents of the several Medical Colleges and Societies, in the Metropolis, while, against the impartiality of a body so constituted, none could take exception. But, in the interim, or until something like uniformity in opinion and practice can be arrived at, one other question is of paramount importance for us all to consider, namely, by what method of administering, and by what indications during the process, can the safety of the patient be best insured, while we continue to mitigate suffering by this powerful agency?

On both these points I wish to offer a few remarks; for, as I have given much attention to the subject, and had considerable experience in the use of chloroform ever since its introduction, I feel it my duty to state the conclusions I have arrived at, and I trust I shall be pardoned if, at the commencement, I refer to a pamphlet(a) I published three years ago, and again earnestly call attention to the following quotations:—

"I usually administer it on sponge, placed on a small plated mask, with flexible edges, made by Messrs. Fergusson, the surgical instrument makers, near St. Bartholomew's Hospital. This little apparatus is cleanly and convenient for covering the mouth and nose; not being complicated with valves, it cannot get out of order, and it is perfectly easy to breathe through."(b)

"... I very much prefer this mode (the mask) to the napkin or handkerchief; patients complain of the latter producing a sensation of suffocation. The chloroform, too, is spread over a large surface, and when folded up cannot be so conveniently directed, nor kept so much under control. The mask I entrust to patients to hold for themselves; if they find the vapour too strong at first, they can remove it, and accustom themselves to it gradually."

Now, as to the best method of administering it. I am aware there are many practitioners whose opinions are deserving of respect, who still advocate the use of the napkin or handkerchief, and as far as I can ascertain, on the ground of its being the simplest mode, and the one always adopted in Edinburgh. But I doubt if it be the simplest mode; it certainly appears an unphilosophical one. A comparatively large and unmeasured quantity of chloroform is poured on a folded handkerchief, which quickly spreads over the greater part of its surface. As respiration could not be carried on through the handkerchief, it is held at a little distance from the mouth; the chloroform must, therefore, evaporate, and mingle with the surrounding air before it can be inhaled. Besides the waste this occasions—an ounce being used when a drachm would suffice—there are no means of knowing how much of the vapour the patient is inhaling; that will depend in a great measure on the nearness of its approach to the mouth. The handkerchief shuts out from view a considerable portion of the face, and during the critical part of an operation, or when an operation possesses more than usual interest, there is a risk of the attention being withdrawn from the chloroform, and by the handkerchief being inadvertently allowed to press on the mouth and nostrils—of excluding air altogether.

Another great objection to the use of the handkerchief I shall have occasion to refer to presently; but I think those already mentioned quite sufficient to counterbalance any advantage to be gained from its simplicity.

Masks of various forms, for covering the nose and mouth, fitted with valves, are frequently employed. The object of the valves is, to prevent the breath returning through the sponge which holds the chloroform.

During inspiration a valve opens, to admit air impregnated with chloroform; it then closes, and the expired vapour escapes through a second valve, the two opening and shutting alternately. This plan is cleanly and economical, inasmuch as it prevents a wasteful discharge of vapour into the apartment. Its great drawback is, the liability of the valves to get out of order, or to be impeded in their action; more especially when respiration becomes feeble, or when the patient inhales in a reclined or recumbent posture, the valves, which are arranged to act vertically, being then placed in a horizontal position. Under such circumstances, it is evident the requisite supply of air may be diminished or entirely cut off. I have seen this happen on more than one occasion, when, but for the warning afforded by the suffused state of the countenance, and the purple hue of the lips, the patient would have been suffocated.

For these and other reasons, I prefer the simple mask before described, with a sponge just large enough to absorb a drachm and a-half of chloroform; this, as it cannot possibly offer any impediment to respiration, requires no attention, unless to renew the chloroform, during the process of inhalation. I always allow patients to apply it themselves, as long as the power of holding it remains; by inhaling for a few moments and removing it at pleasure, they gradually become accustomed to the vapour, and confidence is gained. When these attempts have been renewed three or four times, the chloroform begins to take effect, and tranquillity is insured; struggling, so painful to witness, and the consequent necessity for coercion, are thereby avoided. Relieved from all anxiety on this account, the practitioner is enabled to devote his undivided attention to the patient's respiration. To this end the throat and upper part of the chest should be divested of covering; and, from the commencement of inhalation until its termination, every respiration should be carefully noted; while the respiration is free, there cannot possibly be danger; the moment hesitation or embarrassment is perceived, the chloroform should be removed, and then, by compressing the chest, a single free inspiration will suffice to place the patient in safety. In experiments on domestic animals,

(a) "On the Use of Chloroform in Dental Surgery," Highley, Fleet-street, 1849.

(b) This is a point to which too much importance cannot be attached. Some of the fatal cases related, I fear, have arisen from the folds of the napkin being too thick, or from valves and stoppers becoming fixed, and thus preventing the admission of the necessary supply of air. Those who administer anæsthesia should carefully watch the patient's breathing. The latter affords a far better indication than the state of the pulse, the heart's action, or the condition of the pupil, all of which will be found to vary in different individuals."

I have invariably found, however feeble respiration had become, if the chloroform were removed, and the animal exposed to the air, it quickly recovered; but when, on the other hand, breathing had entirely ceased—although no time were lost—neither artificial respiration, opening the jugular vein, nor any means I could employ, succeeded in restoring it; and I am, moreover, informed by a gentleman who has repeatedly tried galvanism and electricity with the same object, that his attempts were equally unsuccessful.

When the handkerchief is used, continued attention is required to hold it in the proper position, and then it obscures so much of the face and neck that it is difficult to watch the indication I have spoken of. In such cases the state of the pupil is occasionally noticed, and the pulse from time to time referred to; but while the former is an uncertain, the latter may prove an unsafe guide, and ought never alone to be depended on. At times, and under the same circumstances, we find the pupil contracted, at others dilated, its condition seeming to depend on the temperament of the patient. During the early stage of inhalation, the heart generally beats quickly, and often tumultuously; yet I have known a pulse at 140—perhaps from the excitement of entering the operating theatre—gradually drop down to 100, under the influence of chloroform; and I believe physiologists are agreed, that the heart's action may continue a minute or longer after respiration has entirely ceased.

In the recent fatal case, the failure of the pulse appears to have afforded the first indication of danger; how long the patient had then ceased to breathe is not stated, and probably is not known. But, whatever the period, the attempts to promote respiration were partially successful, and,—although dangerous to push the chloroform so far,—had the failure been detected on the instant, is it unfair to believe the result would have been different?

I would, therefore, again most emphatically repeat, *watch the breathing*. It is now more than three years since I pointed to this as an unerring guide; subsequent daily experience has tended to confirm the opinion I then expressed; and I can conscientiously declare, in the numerous instances in which it has fallen to my lot to administer it, I have never witnessed symptoms which caused me a moment's uneasiness; nor have I heard of subsequent effects more formidable than sickness and depression.

A few words as to the quality of chloroform. I have obtained it from many sources, and to the credit of chemists be it said, with one exception, have found it pure. In the instance referred to, it was supplied by a wholesale druggist to a public institution; the odour was peculiar, and it left on the sponge a most offensive residuum. But, however pure and carefully prepared, chloroform is liable to decomposition. On one occasion, in replenishing a bottle in daily use from a larger supply kept in a cool cellar, I noticed a vapour resembling the fumes of nitrous acid, arising from the neck of the bottle: its effect on the nose was highly irritating, and, in that condition, could not have been inhaled for an instant: in a less advanced stage it might have been administered, and produced unpleasant consequences. On referring to the chemist, from whom it was obtained, he admitted he knew of similar instances; it arose from a sudden decomposition, the causes of which he could not explain. This shows the necessity for watchfulness, taking nothing for granted. When we have satisfied ourselves that each step in the process has been carefully attended to, we need have little fear for the results.

Albemarle-street.

Medical Times & Gazette.

SATURDAY, JUNE 12.

THE INQUEST AT NORTH WALSHAM.

A case in which the medical skill of an homœopath, Dr. Bell, of Norwich, has not been displayed to advantage, has lately attracted much attention in Norfolk. An inquest was held at North Walsham on the body of the patient, who died from abscess of the kidney, brought on, in the opinion of the jury, by "improper treatment." The facts of the case are simple enough. A so-called charitable lady, who, like many Ladies Bountiful, is gifted with a hankering after novelties, took a poor man, supposed to be suffering from stone, from under the care of his surgeon, and sent him to Norwich, to be attended by Dr. Bell. The homœopath unwisely quitted his globules, and betook himself to the catheter. More force was used than should have been, and the consequence was, that a false passage was made, or such irritation was created, that inflammation of the bladder and abscess in the testicle followed, the patient's health gave way, and he finally sunk with abscess in the kidney.

It is with extreme regret that we observe a regular practitioner, Mr. Webber, is mixed up in the business, by having met Dr. Bell, and assisted him in passing the catheter into the bladder. He has been bitterly punished for his infringement of what should be a binding professional rule. Dr. Bell attempted to shift the blame of the case from his own shoulders to Mr. Webber's, and with such success, that the jury, although they decided that the deceased had been improperly treated, declined to specify by whom! It must have been either by Dr. Bell or Mr. Webber, and whoever reads the case, will have no hesitation in fixing on the culprit; and the ambiguous verdict of the jury has left a slur on Mr. Webber, which is a kind of poetical justice for the sin of keeping indifferent company.

Perhaps nothing is more distasteful to us than the way in which Dr. Bell, by his own showing, treated Mr. Coleby, the surgeon who first attended the case. Mr. Coleby had diagnosed stone in the bladder, had informed the man of the fact, and suggested an operation. Before this could be done, the man was carried off to Dr. Bell. Dr. Bell, after the mild practice with the catheter before referred to, writes to the Fair believer in homœopathy, "that he had examined the man, who was in a deplorable state (!); that he had a small stone in his bladder, and had evidently been under a dangerous affection since last harvest; that she could adopt one of three courses:—She could place him under the care of Mr. Coleby again, *and, when his attention was more immediately directed to the case, perhaps he would be more fortunate in detecting the nature of the complaint;*" or she could send him to the Norwich Hospital, or into lodgings, to be treated by himself.

This was about the coolest thing of all. The way in which the homœopath assumes credit to himself for pointing out the case, and hopes his erring predecessor may be "more fortunate" in the diagnosis when his opinion is known,—and thus attempts to damnify Mr. Coleby in the eyes of a lady who may, probably, have been that gentleman's patient before she turned homœopath,—is one of those nice little bits of diplomacy which, we trust, are practised only by the ingenuous disciples of Hahnemann.

THE CASE OF MR. PASCOE.

We had confidently hoped, as already intimated to our Correspondents, that the unjust sentence passed on Mr. Pascoe would be reversed. We deeply regret to find that we were mistaken. The following letter has been addressed to the Editor of this Journal; and we understand that a similar communication has been sent to other gentlemen who have communicated with the Secretary of State concerning this unfortunate man:—

"Sir,—Mr. Secretary Walpole having carefully considered your application in behalf of William H. Pascoe, I am directed to express to you his regret that there is no sufficient ground to justify him,

consistently with his public duty, in advising Her Majesty to comply with the prayer thereof.

"I am, Sir, your most obedient, humble servant,
(Signed) "W. Waddington."

With this answer we cannot, however, rest satisfied. We have had apparently the whole evidence before us on which Mr. Pascoe was condemned. We found—and our opinion was confirmed by able lawyers—that the medical evidence given on the trial was that which condemned Mr. Pascoe. We asserted without hesitation, that this evidence was erroneous; and the Profession has unanimously agreed in this opinion. We have a right to know on what additional evidence Mr. Walpole grounds his unfavourable opinion. We have been informed, that Mr. Pascoe is not a man of respectable character. This is, however, nothing to the purpose. The real question is, whether the administration of savine is sufficient evidence that the production of abortion is contemplated. This is a question which concerns, not Mr. Pascoe alone, but every man who employs this or any other powerful drug. If Mr. Pascoe's trial is to be a precedent, no man is safe. With all our force we protest against it; and we proclaim it to be a trial in which present injustice has been done to the individual, and by which future injury may be inflicted on the Profession.

Mr. Walpole has "carefully considered" the case. We are bound to accept this statement; but we only claim what is due to our position, when we demand to know the additional evidence, if there be any, which has led Mr. Walpole to sanction the verdict of the jury. We have taken this case up solely on the grounds of justice and right. We knew nothing of Mr. Pascoe, and now know nothing of him, except what vague rumour has told us. Having formed our opinion without prejudice, we cannot rest content with a short and unsatisfactory formal official note.

We entreat Mr. Walpole, unless he wishes to leave a most unfavourable impression on the mind of every member of our Profession, to allow the evidence to be laid before some eminent physician. For example, if Sir James Clark, or Dr. Holland, or Dr. Watson, or Dr. Forbes, be allowed to know the grounds for Mr. Walpole's opinion, and if they affirm the correctness of these grounds, we, and, we think, the body of the Profession generally, will be satisfied. But if this favour be not accorded us, we cannot do otherwise than deem that a deep and crying injustice has been committed, and that an innocent man has been sent to undergo, among the most miserable outcasts of the human race, the penalty of transportation—the victim of professional ignorance and official inertia.

THE MILITARY ORDER OF THE BATH AND THE MEDICAL PROFESSION.

We publish below the addresses signed by two hundred and twenty-two Medical officers now serving in the Bengal army, and presented on their behalf by Mr. Ranald Martin to General Sir Howard Douglas and Lieutenant-General Sir De Lacy Evans. They are testimonies of gratitude to those gallant soldiers for their able advocacy in Parliament of the rights of Medical officers to the Military Order of the Bath. To the persevering efforts of those gentlemen in the Senate, and to their representations to the late Ministry, the Profession mainly owes its eligibility to a justly coveted honour in the gift of the Crown. The difficulty with which this Order was wrung from the professional advisers of Her Majesty must only enhance the value of the services of those who, in season and out of season, so earnestly contended for the full rights of the Medical Profession, and would be contented with no less. It was in vain that those who opposed the grant of the *Military* Order of the Bath to Medical men contended, that as they shared no common danger with the soldier in the field, they had no right to claim with him a common honour; it was in vain this language was used, when the generous testimony of these two gallant soldiers, who have witnessed many a well-fought field, utterly belied such a statement, and afforded proof that the military surgeon was often obliged to be in the very thick of the fight.

To the truth of this testimony, Dr. Davidson, of the 43rd Regiment, has unhappily set the seal of his blood in a late engagement with the Caffres; and that the Naval Surgeon is equally exposed, we appeal with pride to the taking of Largos, where Assistant-Surgeon Sproule was seen stepping from boat to boat, rendering assistance to the wounded, under the murderous fire of the enemy's fort,—the same gentleman who has since been severely wounded at the taking of Rangoon. Of the justice of the claim of Medical officers to the title of C.B., the more liberal-minded members of the two services never entertained a doubt; and recent occurrences, so honourable to their devotion and courage, must now convince all, that the favours of the Crown have only been properly extended to them.

Now, however, that the fight is done, we should be the last to forget those who bore the heat and burthen of the day. The grateful votes of thanks, made by *two hundred and twenty-two* military surgeons in the Bengal Presidency, must be indeed pleasing to the gallant soldiers who are the recipients of the testimonials. There is one other gentleman, however, to whom, as much as to them, the thanks of the entire Profession are due. Sir De Lacy Evans, in acknowledging the receipt of the address to Mr. Martin, begs him to inform those who signed it, "that it was their former comrade and brother officer who exclusively prompted me to move in this matter, who furnished me with the principal facts connected with it, and to whom is, therefore, chiefly attributable the result." This graceful acknowledgment of the services of Mr. Martin is only what he was justly entitled to; and we are sure we speak with the general voice of the Profession when we say, that he who did so much to throw open to medical men so honourable a distinction of the Crown, is well worthy to be one of its first recipients.

"TO GENERAL SIR HOWARD DOUGLAS, BART., G.C.B.

"The undersigned officers of Her Majesty's and the Honourable Company's Medical Staff serving throughout the territories of the Bengal Presidency, impressed with a deep sense of the obligation under which their class has been placed by your admirable Parliamentary assertion of their claims to honorary distinction from the Crown, beg to wait on you with an expression of their sincere thanks.

"You, honourable Sir, were the first who, within the walls of Parliament, made manifest the injustice of not extending a community of reward to a body of commissioned officers, sharing in the responsibilities, hardships, and dangers of their military brethren; and from no one could the exposition come with greater grace, or moral force, than from a commander of so much experience as yourself, who had such ample opportunities of judging the merits of the question, and whose eminently scientific acquirements conferred a lustre on his advocacy.

"Accept, then, Sir, the assurance of the high respect of the undersigned, and of their deep appreciation of the judicious and energetic manner in which you urged the expediency, no less than the justice, of claims which have at length obtained the recognition of their gracious Sovereign.

"That many years of prosperity and happiness may be added to your truly distinguished, valuable, and dignified life, is the cordial aspiration of those who have the honour to subscribe this humble testimonial of grateful esteem."

[Signed by 222 medical officers.]

"TO LIEUTENANT-GENERAL SIR DE LACY EVANS, K.C.B., ETC., ETC.

"The undersigned Medical Officers of Her Majesty's and the Honourable Company's Army, serving at the Presidency of Bengal, entertaining a sincerely grateful sense of the able and generous manner in which, as a Member of the Senate, you have stood forward to press the claims of their class to marks of honorary distinction on the part of the State, do themselves the honour of tendering you their warmest thanks.

"Following up the exertions of their illustrious advocate, General Sir Howard Douglas, you, honourable Sir, have brought masculine powers of reasoning to bear upon the general subject; while your personal experience in the East, as well as in Europe, gave weighty cogency to the whole,—paving the way to a result by which medical officers share in those marks of national honour so precious to the worthy and the brave.

"With a deep sense of your sympathy and services in their cause, the undersigned beg of you to accept of their cordial best wishes for your health and prosperity."

[Signed by 222 medical officers.]

"Green-street, May 29, 1852.

"Dear Sir,—I receive with the highest satisfaction the address which you have done me the honour to present from the officers of Her Majesty's and the Honourable East India Company's medical staff, whose names are appended to that very gratifying document.

"Ever present and attentive in my place in Parliament when any measure affecting the military affairs of the country might be brought into discussion, and never neglectful of any opportunity of acting to the best of my judgment in the manner I thought most conducive to the good of the service, the advantages of the members, and the general bearing of its usages and regulations, I could not fail to perceive, in the case to which this address relates, an occasion on which I might be of some use in exhibiting, and perhaps rectifying, an act of injustice in not extending a community of honorary rewards to the officers of the Medical Staff, who share with their military brethren in all the responsibilities, hardships, and dangers of actual service.

"If I was prompt to undertake this, it was because I felt the case was strong in its justice; if energetic, it was because I deeply felt the wrong; and if I have contributed in any degree to remove the disability, this address is the highest reward a public man, and ho a general officer, can receive.

"I request you will do me the honour to communicate this my acceptance of the address to Sir James Thompson, K.C.B., and any others of the Committee for whom you act; and, in doing so, to request them to receive, individually, the thanks which are due collectively to the body from which the address emanates.

"I have the honour to be, dear Sir,

"Your very faithful and sincere

"HOWARD DOUGLAS.

"To James Ranald Martin, Esq., F.R.S."

"London, May 30, 1852.

"My dear Sir,—Since you have been kind enough to be the medium of conveying to me the address of the Medical Officers of Her Majesty's and the Company's Army in Bengal, I trust you will excuse my requesting your kind offices also in conveying to Sir James Thompson, K.C.B., and the other officers who have signed this address, my high appreciation of the complimentary expressions it contains; and I shall be glad if you will also inform them from me of the fact, though you perhaps may be reluctant to do so, that it was you, their former comrade and brother officer, who exclusively prompted me to move in this matter, who furnished we with the principal facts connected with it, and to whom is, therefore, chiefly attributed the result.

"I have the honour to remain, dear Sir,

"Yours very faithfully and sincerely,

"DE LACY EVANS, Lieut.-General.

"To J. R. Martin, Esq., Grosvenor-street."

THE HOME-MADEIRA AT TORQUAY.

DURING the year 1850, a noble-hearted lady, while temporarily residing at Torquay, conceived the notion of establishing a small asylum for poor patients whose maladies, although of a decidedly phthisical nature, were still not so hopeless but that they might derive great benefit from the delightful temperature of this watering place during the trying winter and autumn months. The rich have long taken advantage of the delicious climate of this and neighbouring watering places, protected as they are by the bold sweep of the southern coast from wintry winds, and rendered humid and soft by the luxuriance of vegetative life almost throughout the year. Why should not the suffering poor also participate in those advantages which Providence intended for all alike?—was the question which this benevolent worker evidently asked herself; and the reply made, was the earnest manner in which she set about removing the difficulties which lay in her way; for by the second season the little hospital was established, with fourteen in-patients, all of whom have gone on well. The plan on which this humane establishment is founded is so excellent, that we wish it all possible success, and shall support it to the best of our power. It is intended to form the Home Madeira, if we might so term it, of the contiguous counties of Berks, Dorset, Gloucester, Somerset, and Wilts, from the large towns of all of which it is readily accessible by railway. It is intended as a shield against the inclemency of those months in the year which are particularly obnoxious to poor patients suffering with chest complaints; opening on the 1st of October, and closing on the 1st of June; and, lastly, it is intended to be in some degree self-supporting. No medical man can doubt the advantages to be gained, by even decidedly phthisical patients, from a pure warm air, a regulated diet, and medical superintendence. That they are capable, when properly combined, of warding off, for years, the dread ripening of miliary tubercles, no one, especially since the establishment of the Brompton Hospital, can deny. There is something in the sea air—the presence, perhaps, of iodine—which renders it peculiarly adapted for such cases; and we shall look upon the establishment of sea-side hospitals, so situated as to form the centres of large districts, as powerful auxiliaries in the treatment of the incipient form of a scourge which has been but too faithfully called "the English Death."

The self-supporting principle, which has been partially adopted at this establishment, is also excellent. Those who can, ought to contribute towards their support in every hospital. To all honest persons with a particle of independent spirit in their composition, it must be somewhat unpleasant to be the recipients of charity in any form. Again, all experience tells us, that that which is paid for is more highly valued than that which is obtained for nothing. Those persons who are in the receipt of weekly allowances, from benefit-clubs, etc., are expected to hand over a certain amount for their maintenance whilst in the hospital; and any person is allowed to claim all the advantages of the establishment for 10s. a week. This is as it should be. Those who enter the hospital, of course, anticipate a residence there during many months of the year; the charge of every individual case is, therefore, considerably higher than it averages in any other hospital, and its means of doing good would be considerably limited if it had to depend entirely upon the contributions of the charitable for support. Many of the poor persons, we understand, nearly maintain themselves by needlework in this establishment; and it seems to us, that employment of this kind might be adopted in a more systematic manner than it is at present in hospitals which treat mild and incipient cases, such as that at Torquay. The very employment would break that drear monotony of the wards which so depresses patients. The inmates of the Blind Asylum at Bristol produce a very considerable income by their industry and ingenuity, in fancy basket-working, etc., and we see no reason why the patients in the Torquay Hospital might not do the like, as

a market for such labours, at a high price, is always obtainable in charitable England. This suggestion is, however, for after-consideration. The aid of the charitable is at present imperatively called for towards building a permanent hospital, the present house not being calculated for its purposes. Towards this object, the lady-founder has already 600*l.* in hand, and 1000*l.* more is required. Who will help in this really good work? "Incipient cancer," we have already proved to be "a delusion and a snare;" but incipient phthisis no one denies; and a subscriber might have it in his power, by a very small donation yearly, of saving or prolonging many valuable lives.

THE BRITISH MEDICAL FUND.

We have great pleasure in complying with the request that has been made to us, to give the following Document a place in our pages. Its contents are calculated to call forth feelings at once cordial and melancholy. On the one hand, it presents the picture of a body of liberal-minded and noble-hearted men, devoting themselves with the utmost zeal to excogitate and establish an admirable institution for the good of their brethren, without other fee or reward than their own consciousness of doing good; and on the other, those brethren, or the majority of them, sitting by in thoughtless apathy, regardless alike of the boon itself and of the labours of those who are proposing it for their acceptance. It is truly humiliating to reflect, that while every vulgar trade, studious of self-respect and spurning mere charity, has got its benefit society, its bank of independence, to enable its members to meet all the sadder contingencies of life—sickness, old age, widowhood, orphanage, and death itself—by the simple and facile process of deducting a pittance from their earnings in the day of youth, health, and prosperity, while the Medical Profession alone has disdained such a noble resource, and set itself down contentedly to suffer, or to eat the ignominious bread of charity for relief. Nay, it appears from the authentic document we publish, that the members of the Profession have, as a body, not only neglected until now to provide for themselves such a stay in trouble; but that they have actually rejected it when raised by the gratuitous labours of a few noble volunteers, and presented to them in a matured and practical form, with the humble request that they would condescend to help themselves, by taking advantage of its admirable provisions!

Nevertheless, although it is clear that the Directors of the British Medical Fund could not, under actual circumstances, have come to any other conclusion than that recorded in their Report, we can hardly yet be brought to entertain it even as a possibility, that the Profession will allow so admirable an Institution to become extinct,—at least without making one effort more to save it. After the almost unexampled labours of the Directors, thus so sadly requited, it would hardly be reasonable to expect that they should enter on a new career of exertion, even in the same good cause; but we cannot, for a moment, doubt that, should the Profession at large call upon them, the same sentiments which have hitherto led them to devote so much of their valuable time and intellectual power to it, will still induce them to lend their aid in carrying on the great experiment, if not by their own personal co-operation, at least by their counsel and advice, and by the communication of all the practical knowledge which their long experience has enabled them to accumulate. Notwithstanding the past apathy of the members of the Profession generally, in regard to their best interests, we still are willing to believe that, if the great experiment could be carried on for a few years longer, to afford time for fuller consideration and reflection, they would yet awake from their lethargy in sufficient numbers to enable it to be conducted to a successful issue. Judging from some statements in the Report, we should imagine that, if the sum of 2000*l.* could be at once subscribed, it would be sufficient to accomplish the great end in view. TWO THOUSAND POUNDS!

> "Shall it, for shame, be spoken in these days,
> Or fill up chronicles in time to come,"—

that all the independent spirit, and all the well-earned gains of the whole Medical Profession in England, were inadequate to the production of such a paltry sum for such a noble purpose? *O Dii immortales avertite et detestamini quæso hoc omen!*

REPORT OF THE DIRECTORS,

READ AT A MEETING OF THE MEMBERS OF THE BRITISH MEDICAL FUND, HELD JUNE 2, 1852. JOHN FORBES, M.D., F.R.S., IN THE CHAIR.

Gentlemen,—You have been made aware, by the circular which you have no doubt all received, of the purpose of the Directors in calling the present meeting. If this announcement has excited in your minds some surprise as well as regret, it is hardly necessary to say how much keener these feelings must be in the minds of those who, for the last two years and! a-half, have been devoting themselves to the formation and establishment of the Society, and who entered on their task of framing it with the utmost confidence of being able to bring it to a prosperous issue.

Deeply impressed with the necessity of such an institution, and thoroughly satisfied that the form which they had given to it was admirably calculated to meet and remove many of the more pressing evils that beset the path of their medical brethren, the Directors worked zealously on; for a long time never doubting that their labours would be eventually crowned with success, and that they should thus be the happy means of conferring an inestimable benefit on the Profession. Having, however, at length, ascertained that the members of the Profession are not, as a body, sufficiently awake to the importance of the undertaking, or sufficiently alive to their own interests, to give it the support it requires, the Directors are reluctantly compelled to take the only course left open to them as conscientious administrators, and resign into your hands the offices they hold, and the management of the affairs connected therewith.

It is now some time since the Directors began to entertain doubts as to the eventual success of the Society; but, naturally unwilling to take any step that could tend to interfere, in any way, with its possible progress, or preclude the accession of that more general support and patronage which they still fondly hoped might be extended to it, they persevered in their original determination, leaving no means untried that appeared to them calculated to promote the interests of the Society, or which was attainable by the resources placed at their disposal. The interests involved in the undertaking were much too precious in their eyes, as members of the Medical Profession, to allow them to do their work with indifference or negligence, much less to abandon it, while there yet existed any reasonable prospect of its being brought to a successful issue. They felt that, entrusted as they had been with the direction of a great experiment devised for the good of their brethren and themselves, they were bound not to interrupt it until it had been fairly and fully tried. A fair and full trial, they are warranted in saying, has now been made; and, although the result has been very different from what they desired, they have no alternative but to consider their work as completed, and their exertions at an end. It will be for you to determine, whether the attempt should be renewed, under other management, and with or without some modification of the plan.

In resigning their trust into your hands, the Directors think it right to give a brief report of their proceedings from the beginning.

The fund, as you all know, took its rise from a previous attempt by Mr. Daniell to establish a Society on a somewhat similar principle, viz., that of securing annuities to the subscribing members and their widows. In the course of four years, Mr. Daniell had obtained 182 subscribers, and had

received a considerable sum in donations, but had not succeeded in carrying out his object to any practical purpose. Finding it difficult to work such an institution in the country, and ascertaining that there were some practical defects in the original plan, Mr. Daniell at length resigned the direction of his Society, at a public meeting, held in London in October, 1849. On this occasion, a Committee was appointed to place the Institution on a new and more scientific basis, and to carry it out on such principles as might be at once sound and practical. As it was from the members of this Committee that the subsequent Direction was mainly formed, the Directors are enabled to speak of the proceedings of the Committee as of their own.

The first business of the Committee was to determine the general principles on which the future Society should be constituted, and the various objects it should embrace. To attain this end, no labour was spared by the Committee, either in studying the subjects themselves, or in seeking for advice and assistance elsewhere, from those best qualified to give it. In due time, the plan of the Institution which was finally adopted by the members was completed. You are all well acquainted with it.

While still proceeding with their task, the Committee, deeming it most important for the future success of the Institution, that every publicity should be given to its plan, and as wide a co-operation and patronage as possible of the members of the Profession secured, endeavoured to attain these objects by means of circulars, and every other practical form of advertisement. One of these preliminary steps was the formation of an extensive Provisional Committee from all branches of the Profession, and from all parts of the country, who might be able to aid the Managing Committee with their counsel, and to whom might be submitted the plan of the Society when matured.

In answer to their appeal, the Committee obtained the consent of about 300 gentlemen of the highest standing and influence in the Profession to have their names enrolled as a Provisional Committee; while many others, who, from various causes, declined to enrol their names, favoured the Managing Committee with letters expressive of their approval of the Society, and promising it future support. The members of the Provisional Committee were accordingly called together, at a public meeting, held at the Freemasons' Tavern on the 23rd of March, 1850. On this occasion, the Managing Committee gave a detailed report of their past proceedings, and submitted to the gentlemen present a minute outline of all that they contemplated as to the plan and future government of the Society; and the meeting not only sanctioned all the past proceedings of the Committee, but adopted every suggestion and proposition made to it without a dissentient voice. The Committee was re-appointed, with a request, that they would continue their labours, and, as speedily as possible, lay the whole plan, as sanctioned by the meeting, before the Profession at large.

Confirmed in their views by so favourable a judgment, and supported by so extensive and influential a co-operation of their brethren, the Committee proceeded in their task with increased confidence. In accordance with the recommendation of the meeting, they drew up a comprehensive statement of the whole plan and objects of the Society, with specimens of the tables constructed for them by Mr. Neison, and a list of gentlemen composing the Provisional Committee. This prospectus the Committee had printed, and transmitted by post to every legitimate member of the Profession in England and Wales whose address could be procured, with a request, that those gentlemen who approved of the projected Society should forward their names for enrolment as future members. This circular was received by the Profession with very general approval, if the Committee may judge from the tenor of the numerous communications received in reply, and, still more, by the numbers that announced their intention of taking an effective part in furthering the objects of the Society,—no less than 158 gentlemen having, shortly after, expressed their desire to join it, and 111 having actually paid their subscriptions as members.

The Committee having, at length, succeeded in completing all the arrangements to their satisfaction, called a meeting of the members, on the 31st July, 1850, to obtain their formal sanction to the plan of the Society, and to the Rules and Regulations prepared for its future governance. At this meeting, all the Committee's past proceedings were sanctioned and approved; the Rules, after discussion and some amendment, accepted; and the members of the Managing Committee elected as Directors for the ensuing year.

When, at the public meeting called by Mr. Daniell in November, 1849, the Managing Committee accepted the trust of framing a new Society on a broader and more practical basis, they were well aware, that pecuniary means must be provided to enable them to meet the expenses which were inevitable in such an undertaking. These means were provided by the funds still remaining in Mr. Daniell's hands, and which, to the amount of 123*l.* 0*s.* 8*d.*, were transferred into the hands of the Committee.

In the statement of the accounts subjoined to the present Report, it will be seen what the precise outlay incurred by the Committee was; it is here referred to chiefly for the purpose of remarking, that a large portion of the sum mentioned was necessarily expended in their operations previously to the absorption of the original Committee into the Board of Directors. At the public meeting of the members it was necessary, therefore, to settle in what way the future expenses of the Society should be met during the period that must necessarily elapse before the cost of management could be met by the profits of the commercial part of the undertaking. It was accordingly settled by the meeting that, until this period arrived, the expenses should be borne by the funds derived from the donations and annual and life subscriptions of the members, or by such part of them as might be required for the purpose. It was self-evident that, without such an arrangement, the Society could not have any chance of success, as the important experiment which all were eager to make could not even be set on foot on any other conditions. It was on these terms, consequently, that the Directors undertook the conduct of the Society; and they feel assured that the members, whose liberal contributions have enabled them to proceed so far, will never regret that they have, at so small a sacrifice, been the means of giving to the Profession, and particularly to its less affluent members, so splendid an opportunity of consulting their own best interests, and the interests of those who are nearest and dearest to them. That the Profession at large has failed to take advantage of such opportunities, must be a matter of deep regret to all; yet the Directors are consoled by the reflection, that they have spared no exertion to place this boon within the reach of all who might be in a position to need such assistance.

The Society being thus formally constituted and entrusted to their management, the Directors forthwith proceeded to take the steps that appeared necessary to enable it to effect its purposes, by engaging offices, by appointing a secretary and clerk, by getting it enrolled as a benefit Society, according to law, by providing all the requisite books and papers, and by organising plans for making it as extensively known as possible throughout the Profession. In addition to the ordinary mode of advertisement in the public prints, particularly in the medical journals, they set on foot an extensive personal canvass of the members of the Profession, both in town and country, which has been carried on, up to a recent period, to the utmost extent their limited funds could justify. For this service they were fortunate in finding in their Secretary, Mr. Hawtayne, a most competent and efficient officer, who not only discharged the duty entrusted to him with the utmost zeal and assiduity, but performed it with such cordiality, comity, and consideration, that nothing was left undone that was calculated to make his canvass successful. During the first and second year of the Society's existence, Mr. Hawtayne thus visited many of the principal towns in England, and the Directors feel bound to state, that a great portion of their success, imperfect as it has been, has been owing to his visits. It was mainly from the effects of these visits, as shown by a limited accession of members, and yet more by the almost unanimous expression of approbation of the plan of the Society, elicited at the public meetings called by the Secretary, that the Directors, in reporting their proceedings to the members at the end of the first year, were led to congratulate them on the satisfactory progress and prospects of the Society, though they could not conceal from themselves the disheartening fact, that the number of subscribing members, and still more of policy-holders, was considerably less than they had expected, and much less than they thought so admirable an Institution should have commanded. On this occasion, they could only report, that they had obtained 179 annual and life subscribers, and had issued but 23 policies in the Provident department. Feeling, however, that a

sufficient period had not elapsed to justify them in regarding the great experiment as yet sufficiently made, they consented to accept office for another year, encouraged by the cordial manner in which their past services had been recognised by the members, and not without hope, that the seed they had been so assiduously sowing, as Committeemen and Directors, during the preceding twenty months, might show corresponding fruit during the succeeding twelve. You have already been told that, in this hope the Directors have been disappointed; although they are conscious of no falling-off in their own personal exertions, or in the enforcement of means that seemed best calculated to insure success. Their system of communication and correspondence with the Profession has been continued; the amount of advertisement in the Medical Journals largely increased; and the visits made by the Secretary to the provinces more frequent and prolonged.

Having persevered in their endeavours for three quarters of the current year, the Directors felt it then necessary to investigate minutely the whole state of their affairs, in order that they might have time, before the Annual Meeting, to come to a determination as to what their future duty was in relation to their constituents. The result of this investigation was the conviction, that they ought no longer to delay calling the members together, in order that they might decide for themselves as to future proceedings. Without some great and speedy change in the prospects of the Society, the Directors felt, that it was impossible much longer to conduct it without running into debt; and, as they could perceive no evidence of such a happy change of prospects, they had no other choice but to resign into your hands the trust with which you have honoured them, and, with this, the future destiny of the Society.

A brief view of the recent progress and actual condition of the commercial part of the Society, as to its engagements and funds, will sufficiently prove to you that no other alternative was left to the Directors.

The total number of annual and life subscribers from the commencement has been 349: of this number, 68 have been added during the current year,—an addition, however, counterbalanced by the secession of at least an equal number of the old members; 79 having, up to the present date, failed to renew their subscriptions. This falling-off in the subscriptions would not alarm the Directors if they were enabled to state, that it was compensated by an equivalent increase of funds derived from policies. This, however, they regret to say, is by no means the case, as will appear from the following statement:—The total number of policies issued from the first, on which per centage could be made available, have been but 19; namely, 15 for life assurance, and 4 for deferred annuities: the total premiums on which amount to 115*l.* 13s. 9d., admitting of a deduction of only 11*l.* 11s. 5d. towards meeting the expenses of the Society.

It is true, that, in addition to these, 21 policies have been granted (conditionally) for provision during sickness, and 4 for reversionary annuities; but as these are subject to the restriction of the premiums being returned, in case a certain number of policy holders is not attained, no deduction could be made from them for the support of the Society.

And here it will be necessary to give some explanations respecting the proceedings of the Directors in regard to some of these policies.

It will be remembered, that the Society was advised not to undertake any responsibilities under the head of reversionary annuities until 250 subscribers for that form of annuities should have been obtained. The Directors, however, feeling the great advantages calculated to result to members from this branch of the Society, and desirous of bringing it into operation, proposed an arrangement with the Medical Invalid and General Life Office, by which that office undertook to hold itself responsible for all risks and liabilities, until the number of 250 should be completed, or until the Society should be in a position to redeem them. In adopting this course, the Directors felt they were consulting the best interests and security of the members in every way; first, by enabling them at once to avail themselves of these benefits at their present age, and while their health rendered them eligible; and, secondly, by guaranteeing the commercial security of their policies. The Directors, therefore, cannot feel otherwise than assured, that, in this arrangement, they shall have the entire sanction and approval of those gentlemen who have availed themselves of such provision for their families.

On the same ground, the Directors determined to issue policies for the Sickness Fund, subject to somewhat similar restrictions. They hoped, that a spirit of mutual encouragement among the Profession generally would be thus engendered, and that by that means the restrictions as to number might be more readily removed. Those gentlemen, however, who have taken out their policies for this particular fund, have done so on the understanding, that, should the required number of 200 subscribers not be obtained by the 1st of February, 1853, they will be at liberty to withdraw their premiums free of every deduction whatever.

The Directors have also made arrangements with the Medical Invalid and General Life Office, to relieve them of the liabilities already incurred on account of the policies they have issued for life assurance, until the 28th July, (the ordinary period fixed for the Annual General Meeting,) thereby securing the interests of the policy holders until the pleasure of the members now assembled shall be known with regard to the future mode of dealing with the Society.

The following are the heads of the pecuniary transactions of the Society from its commencement up to the present date; a detailed statement of which will be found in the auditor's Report now on the table:—

GENERAL STATEMENT OF ACCOUNTS,

From the 25th of December, 1849, to the 22nd of May, 1852, inclusive.

RELIEF BRANCH.

RECEIPTS.

1850: Feb. 9.	£	s.	d.	£	s.	d.
To amount transferred to Provisional Committee by Mr. Daniell ..				423	0	8
1852: May 22.						
To Life subscriptions to this date ..	373	16	0			
Annual do. do.	475	13	0			
Donations	67	9	0			
				916	18	0
Per centage on premiums transferred from Provident Branch				16	5	6
Amount received for Rules				2	15	0
				£1358	19	2

PAYMENTS.

1852: May 22.	£	s.	d.	£	s.	d.
By Expenditure to this date				1194	18	10
Amount invested				121	5	7
Advance for premiums paid on Policies re-assured				19	17	3
Amount of stamps on hand				1	6	6
Balance in hands of bankers ..	£13	5	2			
" " " Secretary ..	8	5	10			
				21	11	0
				£1358	19	2
To available assets				£164	0	4

PROVIDENT BRANCH.

RECEIPTS.

1852: May 22.	£	s.	d.
To Life-assurance premiums	126	7	4
Deferred annuity do.	38	19	8
Sickness Fund do.	107	13	7
Reversionary annuity do.	65	1	11
	£338	2	6

PAYMENTS.

1852: May 22.	£	s.	d.
By amount of premiums invested	240	7	9
Premiums paid on reversionary annuity policies re-assured	65	1	11
Per centage on premiums transferred to Guarantee Fund	16	5	6
Balance in hand	16	7	4
	£338	2	6

If any part of the foregoing statement should convey the impression, that the expenses of conducting the Society have been large, the Directors feel assured, that such an impression can only arise from the comparative smallness of the receipts. Had these been such as the Directors were led to anticipate, a far different complexion would have

been given to such a statement. The Directors have no hesitation in expressing their conviction, that no Society, having similar pretensions, has ever been established for so small a sum as that hitherto expended on this.

It must also be borne in mind, that as many items under the head of "Preliminary Expenses" would not occur again, it might, consequently, be certainly expected, that the amount of subsequent expenditure would be considerably reduced below even the present amount.

It may, however, be estimated, that under the most economical management, a Society like this could not be conducted, as an independent Institution, under from 400*l.* to 500*l.* a-year. Now, to yield this amount, without encroaching at all on the sums subscribed for benevolent purposes, would require an annual income from premiums on policies, of at least 4000*l.*; whereas, the income at present arising from that source is only 270*l.* 0s. 6d. That the first-named amount of income is not larger than the Society might, with some confidence, have calculated on receiving, may be readily demonstrated, by taking a fair average on the transactions already effected with the Society. By this, it is shown, that 200 members subscribing to the Sickness Fund, would yield an income of 760*l.*; and 250 holding policies for reversionary annuities, a further sum of 4375*l.*, making a total of 5135*l.* It will thus be seen, that even so small a number as 450 members out of a community amounting, at least, to 15,000 or 16,000, would have afforded ample means for management, exclusive altogether of other resources; how much more than sufficient these means would have been, if, instead of 450 members, 1500 members, (certainly by no means an unreasonable estimate,) had joined the Society as policy holders, is self-evident.

The Directors have already expressed their extreme regret at having to announce to you such a consummation of their labours, and such a gloomy close of prospects that had opened with such brilliant promise. This regret they must long feel; but it will be lightened by the conviction, that they did their best to bring about a different issue, and that the object for which they were striving was at once admirable in itself, and of the highest importance to the Profession. They think that, in neglecting to avail themselves of the benefits offered by the Society, those gentlemen for whom its provisions were especially designed, have not only made a great mistake, but have committed a grievous wrong on their best interests; and the Directors believe, that when the means are no longer available, they will awake to a due appreciation of the greatness of the boon they have lost by their apathy and negligence. It is to be hoped that, if such a period arrives, the Profession may exert their powers to resuscitate this Institution, (they can hardly create a better;) and, learning wisdom from the past, may, by the supply of more timely and more copious nutriment, rear it to maturity and vigour. To continue the professional metaphor,—the Directors must declare, that the present decay of the Society is in no degree owing to any inherent constitutional defects, but is the result of inanition from external influences.

The Directors will only further add, that, though now formally resigning their offices into your hands, they are most ready to resume them for a time, if such be your wish, in order that the financial affairs of the Society may be finally wound up and brought to the best issue of which they are susceptible.

By order of the Board,
GEO. HAWTAYNE, Secretary.

The following resolutions were passed:—

Proposed by Dr. Peacock, seconded by Mr. Foster, and resolved:—

"That this meeting receives the Report now read; that it be printed and circulated among the members of the Society; and that it be brought under the notice of the Profession at large through the medium of the Medical journals."

Proposed by Dr. Jervis, seconded by Dr. Chowne, and resolved:—

"That, in accordance with the recommendation in the Report of the Directors, this Society be dissolved; and that the Directors be requested to take the necessary steps to wind up the affairs of the Society as speedily as possible, in accordance with the laws."

Proposed by Mr. Ince, seconded by Mr. Self, and resolved:—

"That this meeting accepts, with much regret, the resignation of the Directors, and requests them to continue their labours to wind up the affairs of the Society."

Proposed by Dr. Jervis, seconded by Dr. M'William, and resolved:—

"That this meeting offers its warmest thanks to the Directors for their unwearied exertions in behalf of this Institution, and regrets that their efforts have been so feebly seconded by the Profession as to render it necessary for them to discontinue their labours."

Resolved unanimously,—

"That the best thanks of this meeting be offered to Dr. Forbes for his very courteous conduct in the chair."

REVIEWS.

Chapters on Mental Physiology. By Henry Holland, M.D., F.R.S., etc., etc., etc. Founded chiefly on Chapters contained in "Medical Notes and Reflections," by the Same Author. 8vo. Pp. 301. London: Longman and Co. 1852.

Dr. Henry Holland has been long known to the Profession as a most able physician and accomplished scholar, one of whom its members were justly proud. He occupies the highest position in its ranks, and no one denies his right to it.

His present work consists of eleven chapters. Four of these chapters are now published for the first time. With reference to the remaining seven, Dr. Holland says:—

"Those who may have read my 'Medical Notes and Reflections' will, perhaps, recollect such chapters, as occurring in different parts of a volume chiefly devoted to subjects more strictly medical in character. Thus interposed, however, among the latter, they were deficient in the sequence and connexion naturally belonging to the topics they treat of, and which may be considered almost indispensable to a thorough understanding of the subject.

"This deficiency I have sought to supply in the present volume, by bringing these several chapters into one series, and by adding others which have appeared necessary to the completion of the plan."

The seven chapters, however, the names of which are derived from the author's previous work, have been entirely re-written, and very materially enlarged, so as to give to the whole work a certain unity, and to embody "the recent accessions of knowledge on numerous points having express relation to them."

Mesmerism and Homœopathy are touched on frequently in the course of his work by Dr. Holland; and the sound sense displayed in discussing these subjects, and the philosophical tone of his remarks on them, cannot fail to undeceive some of those men of learning and position who have been beguiled into lending the weight of their name for the spread of the dogmata of these *pseudo*-sciences.

The character of Dr. Holland's mind is stamped by his chapter on Medical Evidence:—

"There can be few better tests of a sound understanding than the right estimation of medical evidence; so various are the complexities it presents, so numerous the sources of error."

In the opinion expressed in this the opening sentence of this admirable chapter we heartily concur; and, of the extraordinary soundness of its author's understanding, after reading that chapter, none will doubt. To make an analysis of it would be impossible; it contains no superfluous word. Suffice it to say, that Dr. Holland looks to an advance in position of medicine as a science, "not by the addition of new facts only, but even more by new methods and instruments of research, and increasing exactness of details in every point of inquiry."

The second chapter is on the effects of mental attention on bodily organs. The chapter in the "Medical Notes and Reflections" bearing the same title occupies thirteen pages; this consists of thirty-three pages, and in it mesmerism and homœopathy receive some of Dr. Holland's hardest blows.

After speaking of the frequent struggle between the voluntary and the automatic parts of our nature, and of the singular impairment or loss of voluntary power, and change in other mental faculties from certain impressions on the sensorium, and alluding to the remarkable diversity in different temperaments, as respects their liability to these changes, Dr. Holland remarks, that it is the nervous or hysterical temperament that is the most prone to be acted upon by mesmeric influences.

"Applying these facts" (he continues) "to the more mysterious exhibitions of this influence, they cogently suggest the question, how it can happen that such manifestations of new and exalted power—the knowledge of events far distant in space and time—the instant recognition, without inquiry, of the seat and nature of internal disease, and of the befitting treatment—vision, or that perception which is equivalent to it, through other organs than the eyes, etc.—how it happens, I say, that faculties so marvellous should be given to those of feeble, vague, or distempered mind, and denied to men of the highest mental energy and intellectual powers?—given, moreover, by persons who themselves possess none of the faculties which they thus miraculously bestow?"

Dr. Holland then proceeds to illustrate the influence of attention, as an act of mind voluntary or involuntary, upon the bodily organs in a state of disease.

"To the cure of the dyspeptic I have already sufficiently alluded in illustration. Closely akin to this is the disorder of the hypochondriac, some of the most singular perversions of which admit of the same explanation. Here the patient, in fixing his consciousness with morbid intentness on different organs, creates not merely disordered sensations, but often, also, disordered actions in them. There may be palpitation of the heart, hurried or choked respiration, flatulence, and other distress of stomach, irritation of the bladder, vague neuralgic pains, all arising from this morbid direction of attention to the organs in question. It is certain that many of the secretions are immediately affected by emotions of the mind; and the same effects appear to arise from anxious and sustained attention to the parts concerned in these functions."

We regret that the space at our disposal prevents our following Dr. Holland through the whole of this chapter; but we trust that the majority of our readers will master it in full for themselves.

The chapters, or rather essays, now published for the first time are, On Mental Consciousness, in its Relation to Time and Succession; On the Relations of Dreaming, Insanity, etc.; On the Memory, as affected by Age and Disease; and on Instincts and Habits.

The circulation of Dr. Holland's book will not be limited to the Profession; and we rejoice to think, that the more extensively it is read by the public, and the higher the intellectual attainments of that public, the higher will our Profession stand in its estimation. We strongly advise medical men to read it, for the sound views it inculcates on some of the most difficult and abstruse questions that come before them, as well as for the intellectual treat it will afford them; and we also strongly advise them to favour its perusal, especially by all those laymen of education who have been caught by the sophistry of the followers of Mesmer or Hahnemann.

The Oration delivered March 8, 1852, *before the Medical Society of London at the Seventy-ninth Anniversary.* By Edwin Canton, F.R.C.S., Vice-President of the Medical Society, etc. Printed at the Request of the Society. London, 1852.

The importance of the microscope as an instrument of research in medical and medico-legal inquiries, homœopathy and its absurdities, sanitary matters, sewerage, the water supply, ventilation, and extra-mural interment; the Exhibition; and the vast importance for students of medicine of a sound preliminary education, are all ably touched on by Mr. Canton in the pamphlet before us. The style in which the Oration is written is extremely good.

GENERAL CORRESPONDENCE.

REMARKS ON CALCULI.

[To the Editor of the Medical Times and Gazette.]

Sir,—There are a few, I regret to find, among the "Members of the College of Physicians," who, being more vain of the licence of that body than proud of their Doctorate, affect to treat all who are not among the *permissi* with disdain. I fear that Dr. Griffith must be included in this category, if I may judge from the fact, that, ostensibly replying to Mr. Quekett's note, he enters into an elaborate answer to my criticism on his former communication, while ignoring my existence. Such a procedure is generally esteemed uncourteous; but let me assure Dr. Griffith, that, in so doing, he has afforded me considerable amusement, and that he is at perfect liberty, should he deem it necessary to give me a second reply, to hang his discourse on the first name that falls in his way.

Dr. Griffith has been so obliging as to explain how he manufactures cells, or rather apparent cells, from crystals of lithic acid. I have carefully and repeatedly performed the experiment according to his directions; have traced the changes which take place in lithic-acid crystals under the double influence of a solvent and circulatory motion; and the conclusion at which I have arrived is, that no experienced microscopist would run any risk of confounding these imitations of cells with real organic cells. The crystals of lithic acid, however varied in outline, are of a more or less flattened form, and composed of laminæ, superimposed in such a manner, that the centre of the crystal is much thicker than its edges. A section of such a crystal is that of a bi-convex lens. The cleavage of these crystals is in two directions: the one, parallel to the laminæ of which I have spoken; the other, at right angles with them, and transverse. Now, when we place such crystals in a very dilute solution of potass, and give a circular motion to the vessel, the edges of the crystals become rounded, and, at the same time, an equal action being exercised on the upper and lower surface, the crystal is converted into something very like a doubly-convex lens. Viewing an object of this figure by the microscope, it is quite true that some resemblance is given to a nucleated cell; but if a high power be employed, the fibrous structure of the crystalline laminæ is still distinctly visible, and affords a characteristic mark of distinction between the two objects. If the action be prolonged, the crystals are reduced to extremely thin plates, in which all appearance of nucleus has vanished; but the edges of these plates are more or less angular, and they do not present the characters of a non-nucleated cell.

After having to his own satisfaction established the fact, (?) that an apparent cell-wall may be manufactured by the process he has indicated, Dr. Griffith jumps to the conclusion, that what is applicable to crystals of lithic acid is applicable to calculi; and that the disputed cell-walls in the calculi of the horse are of the same nature as those produced artificially by his process. This conclusion is inadmissible for more than one reason, and is the result of imperfect observation. Even *à priori* reasoning would suffice to negative this statement, unless Dr. Griffith has added to his discoveries an allotropic condition of carbonate of lime capable of resisting a very prolonged action of vinegar. I have, again and again, watched with the greatest care the solution of these calculi in ordinary distilled vinegar. The calculi consist either of a single cell, or an aggregation of smaller cells, filled with carbonate of lime in a radiated crystalline condition. When placed in distilled vinegar, the margin of the radiated crystalline mass may be seen to recede gradually from, what I shall persist in calling, an organic cell wall, towards the centre of the calculus, when this is composed of one cell, and finally to disappear suddenly. So different is the appearance of the central undissolved portion of carbonate of lime from the true nucleus when this is present, viewed with a magnifying power of 400 to 600 diameters, that there is not the remotest probability that they could be confounded by any one accustomed to histological research.

If the action of the distilled vinegar be prolonged, the cell walls and nuclei remain unattacked for hours, while the vinegar still retains a strong acid reaction. This is inexplicable on the supposition, that the cell-wall and nucleus consist of carbonate of lime, for we have yet to learn that carbonate of lime is deposited in any animal body in such a state of molecular aggregation as to resist the action of acetic acid, of the strength of diluted vinegar, for any length of time.

The same result was obtained, the carbonate of lime was dissolved out, the cell-walls resisted the action of hydrochloric acid, diluted with four parts of water, and the liquid retained at the termination of the experiment a strong acid reaction. I am not aware of any form of carbonate of lime, unaltered by heat, that is capable of resisting so powerful a solvent for any such length of time.

The carbonate of lime calculi, after having been burned to whiteness, before the blowpipe, present very curious and beautiful reactions with acids under the microscope, which Dr. Griffith has pretty accurately described, but miserably misinterpreted. I shall, I believe, have the pleasure of explaining to him the real cause of the phenomena. When these calculi, after being heated to redness for ten minutes or more in the blowpipe-flame, until reduced to a perfectly white powder, are placed under the microscope, with a power of 220 diameters, in distilled vinegar or hydrochloric acid, dissolved with four parts of water, they are acted on much more slowly than the calculi in their ordinary state. It is quite true, that they are surrounded by a more transparent circle, and that a globular mass is seen in the centre of the sphere, which might be readily mistaken for a nucleus by any one unaccustomed to the observation of true organic

cells. The radiated crystalline arrangement of the carbonate of lime is distinctly seen becoming gradually reduced to a few lines by the progress of solution. A very beautiful series of concentric circles is also occasionally observed at the same time. As this process of solution progresses, the central globular mass becomes more transparent, and finally disappears, leaving a perfect hollow sphere, sometimes with a granulated aspect, at others transparent. This hollow sphere retains its perfectly spherical form when put in motion. After a time a hole is perceived in the sphere, or it splits into hemispheres or cup-shaped bodies, with irregular fractured edges, finally becoming thinner and thinner, until it disappears, if excess of acid of the same strength be present. It is entirely a mistake, that these hollow spheres are insoluble in dilute acetic acid of the strength of distilled vinegar. They are slowly soluble, and entirely disappear, if sufficient time be allowed for solution.

Dr. Griffith attributes this peculiar process of solution to a difference of molecular aggregation between the superficial layer of the calculus and its interior. Had he been aware of the action of heat on carbonate of lime, he would have been able to give a much more rational explanation of this very interesting phenomenon. When carbonate of lime, especially if in contact with organic matter, is heated before the blowpipe, or in large quantities in a crucible, a part of the carbonic acid is removed by heat, and a mixture or compound of carbonate of lime and quick-lime results, which is slowly acted on by acids; still, however, yielding a considerable amount of carbonic acid. Now, in heating these globular caculi, it is sufficiently evident that the surface is reduced to this condition by the action of heat, and that the interior remains in the condition of carbonate of lime. When, then, the calcined calculi are acted on by an acid, the unaltered carbonate of lime within is more rapidly dissolved than the partially-reduced carbonate at the surface, leaving the shell, which, in Dr. Griffith's eyes, so much resembles an organic cell. The solution of the unaltered carbonate of lime goes on from the circumference to the centre, producing the appearance of the globular nucleus, which, as I have already said, is so different from the nucleus of an organic cell, that no experienced microscopist would run any risk of confounding the two objects.

These calculi are renal. Mr. Quekett has seen them in great numbers within the tubuli of the kidney; and there is no doubt that the cell-walls which enclose the carbonate of lime are renal epithelial cells, in which the carbonate of lime has been abnormally deposited.

If Dr. Griffith had read Mr. Quekett's Lecture with the attention it deserved, or if he had attended the beautiful course of Demonstrations of Histology, at the College of Surgeons, last winter, he would have seen, that nothing is more common in the animal series than the deposit of carbonate of lime, either in an amorphous or crystalline form, in true organic nucleated cells.

You, Sir, would have received this note much earlier, had I been enabled to obtain a sufficient supply of the calculi for examination; but I hope that the interval of two months will not have exhausted the interest of the subject.

I am, &c. PH. B. AYRES, M.D. Lond.

Wandsworth-road.

A FEW WORDS UPON THE PRESENT BENEVOLENT MOVEMENT IN AID OF THE VARIOUS MEDICAL PROVIDENT INSTITUTIONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I was truly grieved to see in the *Medical Times and Gazette* of the 5th June, a letter from Mr. Newnham, (a most kind-hearted and benevolent man, and one who has been instrumental in relieving the wants and distresses of many starving members of the Medical Profession, their widows and orphans;) that letter contains much that is true, in the relief afforded from the Benevolent Fund, and I, for one, hope that that fund will increase and continue to pour forth its blessings; and had that letter confined itself exclusively to the benefits of the fund, it would have been well; but it goes on to state the imperfections and impossibilities of the "College" recently projected, (and which bids fair to arrive at completion if time be given). I do think it would have been far better not to have made any allusion to it, although Mr. Newnham's concluding remarks express a desire, that those who subscribe to the one should, also, to the other; but many might be deterred from doing so after reading Mr. Newnham's observations, when he says that the plan is likely to fail from the many objects it attempts to embrace.

Mr. Propert is highly deserving of our warmest and best thanks for his untiring exertions in promoting so desirable an object; and Mr. Daniell is equally entitled to our admiration for the zeal displayed in the plan he has submitted to the Profession, as well as all those who have been instrumental in establishing County Benevolent Societies, like Mr. Martin, of Reigate, who, in the year 1812, with some few medical brethren, assembled at the Coffee-house, Epsom, and formed a Society, called the "Surrey Medical Benevolent Society;" the object of which is to relieve distressed members, widows, and orphans, belonging to the Society. I myself became a member the following year, 1813, and our stock now amounts to 5150*l.*; out of the interest of which two widows have an annual allowance, which enables them to move in a respectable way in society, and many others have, at various times, also received assistance. I believe there are many more of the like kind in the provinces, pouring forth their blessings. Now, each Society possesses claims for our support and attention, and I cannot see why one should clash or interfere with the other; and I am confident it would be far better for the projectors of one plan not to find fault with, or doubt the success of the other. It is expected, that every medical practitioner, who loves his profession, should subscribe either to the one or other, or even to all, if he can do so conveniently; but I have solicited many who possess the means, but who have not the benevolence to subscribe to any; and I do think that a distinction should be made between those who have shown a disposition (when able) to assist in the promotion of benevolent medical institutions, and those who have not; and if proper and just reasons be not given why they have declined assisting in the support of such, I do not see that they are entitled, should circumstances so transpire as to need it, to our commiseration.

At our public meetings, like the one held recently at the London Tavern, at which the Earl of Carlisle so ably presided, when the health of gentlemen present who promote other benevolent medical institutions is proposed, they, in returning thanks, should not make any allusion to the particular schemes they advocate, as being superior to the one they are expressly met to support. It tends to do harm, by destroying the harmony and good feeling of the company, and upon that occasion called forth marks of disapprobation, when one of the speakers addressed the meeting, which in all probability hurt the feelings of the gentleman himself, and did his cause much mischief. Let us, then, go on cheerfully in the various acts of benevolence, each in the way he judges best; but do not let us find fault with, and strive to injure any scheme which we cannot countenance and support. I am, &c.

Croydon. GEORGE BOTTOMLEY.

THE BALL-AND-SOCKET FRACTURE SWING.

[To the Editor of the Medical Times and Gazette.]

SIR,—I regret that up to the present time my engagements have prevented my perusal of Mr. Grantham's letter in your Journal for May 15th, on the subject of the fracture swing.

If that gentleman will kindly re-peruse my former communication on this subject, he will readily observe, that I acknowledge in general terms the previous introduction of the principle; and only ventured to call attention to the ball and socket swing from the conviction, that fractures of the leg were not more generally treated by suspension, only because the swings in use are incomplete, and fail to carry out the principle.

But there is one point in Mr. Grantham's letter which I am sure all reflecting persons will thank that gentleman for mentioning, and, as a general question, it is most important. I allude to the too frequent want of mechanical knowledge and skill which many of our surgeons display, and the absence of any system of education on the subject.

I am confident, that every observant practitioner will readily call to mind numerous instances in which the want of mechanical tact on the part of a surgeon has produced much suffering to the patient, while it has retarded, if not prevented, the due effect of a really scientific mode of treatment.

Undoubtedly the theory and study of surgery are its highest claims; but let us not neglect that, the absence of which, causes the greatest suffering to our patients, and in the possession of which a surgeon is enabled readily to carry out the dictates of science, economise pain, and accomplish what is impossible to those who, whatever may be the extent of their knowledge, cannot appreciate a straight line, or perform the most simple mechanical operation with any degree of certainty.

But to return to the more immediate subject of this letter. Mr. Grantham supports the original leg swing (composed of a shelf, suspended by four cords from the corners) for its simplicity's sake.

Undoubtedly this latter is a most important feature in any apparatus intended for general use; but it must not be forgotten,

that it is first necessary the contrivance should attain all the objects for which it was constructed, and which I hold is not the case in this instance.

It will best answer our present purpose to divide the treatment of fractures of the lower extremity into two classes. The limb may be placed in splints and put in any fixed support which the surgeon may deem best; or the splints being applied, it may be put into some contrivance, allowing of free motion.

If the first plan is adopted, the support upon which the limb is placed cannot be too firm, neither can the limb be too securely fixed within it; that position, as a general rule, being chosen which is the most comfortable to the patient.

If, on the other hand, a support is selected possessing motion, its movements cannot be too free, or the basement from which it hangs too firm; for upon the facility with which the limb follows the spontaneous movements of the body, depends the security from motion of the fractured extremities of bone, and the consequent success of the apparatus employed.

If this is granted, then freedom of motion in every direction is the characteristic which ought to appertain to such an apparatus, and in proportion to the extent in which it fails in this is it imperfect. With one exception, those in use up to the present time possess a very limited degree of motion; but of these, the mode adopted at the London Hospital, and introduced by Mr. Luke, is at once the most simple and effective, and the plan of all others which, in emergencies such as the battle-field or obscure mining practice, will always prove the most effective in the hands of surgeons who, desirous to relieve human suffering to the greatest extent, are not prejudiced in favour of the fixed mode of treatment. The success attending Mr. Luke's adoption of the suspensory treatment of fractures of the leg is best shown by his own words. He says: "Fractures of the leg were a constant trouble to me before I suspended them; now, I rarely meet with a case which gives me any.

If, then, the success of a partial adoption of the principle is so great, surely we may hope, if we can render it more perfect, that our triumph will be comparatively greater.

I cannot allow that the apparatus described by Mr. Grantham has not been superseded. Mr. Luke's system is at once more simple and effective, while Mr. Salter's is better adapted for some cases, but possesses the faults in common with Mr. Grantham's, in being suspended from the centre, and in having its hammock formed of a permanent and water-proof material, (Mackintosh,) which promotes filth, prevents the free access of air to the limb, and cannot be opened at any part, should such a step be necessary, without much injury to the swing.

No limb can be at perfect rest which lies in a swing suspended from a central point, in consequence of the greater weight of the upper portion of the leg, and the necessary tendency of the foot to rise, or, in other words, of the leg to become straight, which will invariably occur whenever the patient loses his voluntary power over it, as in sleep. At the same time, such an arrangement of the swing may be desirable in some unusual cases, and should, therefore, be provided for.

As I remarked in my former communication, the beam of the swing should be suspended from a point, (generally from 1½ to 2½ inches from the centre,) by which the leg lies in the hammock perfectly horizontal, without effort on the part of the patient.

Another important point in which the swing mentioned in Mr. Grantham's letter appears at fault is, that the leg rests upon a padded board, in adopting which we retain some of the worst faults of the old peg-box, without a commensurate benefit.

I now come to the last point for discussion, namely, lateral movement, with perfectly free motion in every direction, and it may be briefly disposed of.

For, if the advantage of the suspensory treatment is, in the main, that it enables the patient to make necessary movements in bed without disturbing the fracture, undoubtedly it is advisable that the limb should be free to follow the movements of the body in any direction without check; while, in proportion to the universality and ease of movement, will be the improbability of displacement of the fracture. Again, although the adoption of the swing will, I doubt not, to a very great degree, prevent the occurrence of muscular spasm, yet it is important that, should it occur, the entire limb should more readily move *en masse*, than the fractured ends of bone upon each other.

But there are some patients who, from great natural restlessness of constitution, fidget themselves so recklessly, and are so callous to instructions, that they will turn their legs quite round in the swing. I have, however, observed, that these patients will accomplish the same if a more fixed apparatus is employed, and will displace their limbs if supported by the peg-box.

In the treatment of such cases, therefore, it is most important that the movement should be unlimited up to a certain point; and though it is necessary to curtail the extent of the lateral motion, by means of a cord fastened at the middle to the centre beam, and at each end, to the sides of the hammock, allowing of free movements on either side up to the limit considered necessary, the movement up to this point cannot be too free.

I will not again trouble you with the enumeration of all the advantages, constitutional as well as local, which are attached to the use of a properly formed leg swing, but would briefly remark upon the importance of a few; and, first, of the universal and almost luxurious support afforded by a common calico hammock, in place of a padded board, also the cleanliness and free access of air which it allows of; secondly, the perfect state of muscular repose gained by the point of suspension being over the centre of gravity, and not the centre of the swing; thirdly, the uninterrupted view of the spine of the tibia, gained by the necessary use of but little bandage; and, lastly, in compound fractures, the facility with which wounds may be dressed.

The constitutional advantages must be even more apparent. In the better retained health, absence of bed-sores, and a lessened amount of that troublesome symptom, stiffness of the joints.

There are also other affections in which the ball-and-socket swing may prove highly useful, particularly in those of the bones of the leg.

I will now draw these observations to a conclusion, regretting they should have proved longer than I had intended. I should not, indeed, have troubled you with them at the present time, had I not keenly felt that fracture-swings would have been in general use long since had they been more generally understood; and I trust, that my support of the principle of suspension and free movement will not be misconstrued into an undue advocacy of the apparatus which has suggested itself to my mind. On the contrary, I shall only be too pleased if others can suggest any alterations which will tend to carry out the principle more fully, rather than discard it because it does not realise their expectations at the first trial. I mention this latter point for reasons which a paragraph in the former portion of this communication will render obvious. Again regretting the length of this communication,

I am, Sir, &c.

Rye, Sussex. ALFRED ROBERTS.

TREATMENT OF PSORA.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is usual among most medical practitioners to consider sulphur, in the form of ointment or bath, as the only remedy in scabies; I am well aware some use mercurial unguents. I do not deny the specific action of sulphur; I only wish to observe, that I use a very simple remedy, (taught me by a district medical officer to one of our largest metropolitan unions,) which is the simple inunction with hog's lard and the warm bath, the latter not being essential; the recovery takes place in a few days. I need not descant upon the simplicity and cheapness of the remedy, but beg to draw attention to its worth in private practice, where, if we visit a lady afflicted with scabies, and tell her honestly and plainly, saying, Madam, you have got the itch!—in nine cases out of ten she would discredit your statement, and be highly offended; so, also, if you sent the ordinary remedy, it would very likely lead her to imagine she had the complaint. I can quote an instance which occurred to myself. Visiting a lady, who said she was tormented by a breaking out and great itching,—I said, Your blood is in a bad state, you must apply the ointment I send, and take some cooling medicine. I sent, of course, sulphur ointment. Next day, on my calling, she said, "I think it must be the itch I have." I said, "Why do you think so?" "Because," said she, "you sent me sulphur-ointment, just what the nurse-maid had when she had the itch." I then confessed I did not like to tell her the truth when I first saw her. By inserting this you will oblige,

Yours, &c. J. C. BARRY, M.R.C.S., L.S.A.

London.

DEATHS FROM CHLOROFORM IN SCOTLAND.

[To the Editor of the Medical Times and Gazette.]

SIR,—In a paper which I read at the Medical Society of London, a few weeks ago, on the cause and prevention of death from chloroform, a report of which appeared in your journal, I gave an account of all the deaths from the administration of chloroform, of which I could find any record. I was afterwards informed, however, on undoubted testimony, in two different quarters, of the death of a little boy in the Infirmary at Glasgow, whilst inhaling chloroform, in order to have the bladder sounded

for stone, some two years ago. No account of this case has ever been published. A death from chloroform occurred in a toe-nail operation at Govan, near Glasgow, in 1848, and the only account the Profession has ever had of this is a brief notice in the *Glasgow Herald*, which was copied into the medical journals. The particulars were, indeed, published, of the case of the lad Arthur Walker, of Aberdeen,—one of those cases in which death occurred from breathing chloroform for amusement, when no one was present.

But a fatal accident is so much a matter of course, from this proceeding, that such instances do not possess the interest or importance which attaches to cases of death from chloroform in surgical operations.

I have heard it said, that there may have been a number of deaths from chloroform in Scotland, of which we have not heard, as there are no coroners' inquests in that country to insure publicity. I am inclined to think there have been others besides the two I have mentioned, for I have been informed through the journals, and privately, of several cases in which the patients very nearly expired. Dr. Simpson would, no doubt, from his influence and connexion, be able to obtain every information on this point without much trouble; and, if he were to publish the particulars of the deaths from chloroform in Scotland, he would add another to the many services which he has conferred on the public and the Profession in connexion with anæsthetics.

I am, &c. JOHN SNOW, M.D.

Sackville-street.

DR. M'WILLIAM ON YELLOW FEVER.

[To the Editor of the Medical Times and Gazette,]

SIR,—In your Journal of June 5, is a letter signed "Thos. Baker," purporting to be a refutation of the views held by Dr. M'William concerning the infectious nature of yellow fever. I have very little doubt, that many of your readers, like myself, will say, Who is Mr. Thos. Baker? And indeed, Sir, the question appears very reasonable; for we naturally like to know what value we may set on those who place themselves in the light of authorities.

In the mean time, will you permit me to ask your logical correspondent a question or two?

Starting with the belief, that yellow fever is caused by *something*, perhaps Mr. Baker can first tell us what that *something* is?

Sir Wm. Burnett, Mr. Baker's great authority, acknowledges, that any fever may become infectious. He says: "I do not mean to deny the possibility of this or any other fever becoming infectious under such circumstances as attended that in the Eclair." It matters not, I imagine, whether infection is proved to happen over a "Bolam bog," in a "Black-hole," or on board a steam-ship; we must still acknowledge that something infects. It is not "heat," it is not "moisture," it is not "a foul hold," it is not "drunkenness," it is not "want of ventilation," it is not "overcrowding," nor a combination of any or all of these which can produce such a disease as yellow fever, for, if such were the case, it would never be absent from our shores.

Dr. Robert Williams, whose "Elements of Medicine" might enlighten Mr. Baker a little, has, in the introduction to his book, the following passage:—"The definite action of causes is the basis of human knowledge, and is equally true in medicine as in every other science." Archbishop Whately would not demur to this, though he might question whether there ever was such a person as Napoleon Bonaparte.(a)

Now, Sir, I would ask Mr. Thomas Baker if he agrees with Sir W. Burnett and the Board of Health in the belief that, under certain conditions, an endemic fever, usually considered to be neither infectious nor contagious, may assume the characters of an infectious disease?

Another fair question is, What does Mr. Baker understand by the word "contagion"? Will he also explain to us what is implied in the word "infection"? It is quite clear, that infection implies the action of something that infects, or, in other words, there is a cause, and it is "the definite action of causes" of infection upon which we require enlightenment.

Mr. Baker seems to lose sight of the fact, that a disease may be simply contagious, as syphilis—contagious and infectious, as small-pox—or infectious only, as hooping-cough. It is on the misunderstanding and wilful perversion of the words "infection" and "contagion" that the whole controversy rests between the so-called contagionists and non-contagionists.

The Board of Health Report on Quarantine, issued in 1849, so confounds and mystifies the subject of contagion, that I would defy any man, unless professionally educated, to fathom the statements and opinions contained in the pages of that book.

Here, Sir, for the present, I leave the subject, in the hope that your energetic correspondent, having challenged the Profession, may be honourable enough to explain distinctly the meaning he appends to the words above-mentioned, for, until this is done, argument is out of the question, though controversy may abound.

I am, &c. INQUISITOR.

(a) "Historic Doubts," etc.

[To the Editor of the Medical Times and Gazette.]

SIR,—In this week's number of the *Medical Times and Gazette*, a Mr. Baker, a clerk at the Board of Health, has been put forward as its advocate. I think Mr. Baker had better attend to the duties of his junior clerkship. Your remarks are quite right as regards the members of the Board; they ought to have been medical men. The only practical man among them is Dr. Southwood Smith, and he is crippled by Mr. Chadwick, who is, in fact, the Board, and who has all the patronage; and, before he is done with it, will make as great a mess of it as he did of the Andover Union under the Poor-law. I am, &c.

Charles-street, Westminster. H. WILSON.

EXTRAMURAL SEPULTURE.

[To the Editor of the Medical Times and Gazette.]

SIR,—In a recent Number you have inserted a letter, signed "W. Hamilton," in which he says, "Perhaps you are not aware that Mr. Walker was applied to, to aid the Government in bringing forward a working Bill on extramural interment, so that an Act might be prepared that would remedy the evil; he refused, and the clerical interests stepped in to mar the benefits to the community of his ten years' campaign."

Allow me, as a friend of Mr. Walker, through the medium of your Journal, to disclaim the accuracy of the above observations. Mr. Walker never was applied to, to aid the Government in the way alleged; nor was it from any refusal on his part that the clerical interests step in to mar the benefits to the community of his campaign, as your correspondent mentions.

When the Board of Health made their Report on a general scheme for extramural interment, all the allusion which it contained to Mr. Walker's fifteen years' labours in the cause of exposing the wrong, was two lines and a half; and, as regards the Government remedy, Mr. Walker only discovered what it was by procuring a copy of the Bill introduced in 1850, by Sir George Grey, for the purpose of "better interring the dead in and near London."

Mr. Walker has never, at any time, advocated the better interring of the dead in and near London. He has spent half a lifetime, and several thousand pounds, in inculcating the reverse. During the passing of the Metropolitan Interments Act, he exerted himself to the best of his ability to have it so amended as to render it unobjectionable; but, as he failed in that attempt, he is not one of those who regret that the Board of Health should have got that Act, and nothing but that Act.

Although the public have not, as yet, responded as they ought to the call made by the Walker Testimonial Committee, I still trust the time is not distant when his long and eminent services in the cause of the abolition of burial within towns and cities will be properly appreciated. Mr. Walker is one of those men who have worked for the common good, not with an eye to such wages as what a long subscription-list indicates; but from a love of the work itself. In due time, then, his labours will surely meet their well-merited reward. In a country which has so munificently recompensed the labours of the statesman who has given us cheap bread, it is impossible to suppose that the surgeon who, at the risk of health, and a large interference with his professional avocations, has done so great a work as to purify the vital air in all centres of population of that which loads it with pestilence and death, will not fail to receive some substantial proof of the gratitude and thanks of society at large. I am, &c.

ONE OF THE COMMITTEE OF THE WALKER

London. TESTIMONIAL FUND.

BETHLEM HOSPITAL AND ITS MEDICAL STAFF OF OFFICERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I read with much interest your remarks on Bethlem and its management; they are much to the point, and may be of great service.

There can be no doubt that the patients at this Royal hospital,

particularly the criminals, have not been treated, from natoral causes, as their circumstances required.

"What rays of sunshine gladden and cheer its desponding and unhappy inmates?" What a difference in the treatment of criminal lunatics at other asylums!

To one asylum which I could mention, several incurable criminal lunatics were sent, many of whom, ere long, I trust, will be liberated, and sent to their own homes,—some having exceeded their term of imprisonment, and are now convalescent.

As regards your remarks on the duties of the physician, I would suggest to your notice, the necessity of urging on the Committee the propriety of taking the rules of some well-conducted asylum as a guide.

For instance, the Royal Asylum of Edinburgh, where there is a physician-superintendent, Dr. Skae, and two assistant-physicians, Dr. Sherlock and Dr. Rowe, and the average number of patients does not very much exceed that at Bethlem. At Dumfries, the asylum under the charge of Dr. Browne, a similar constitution exists.

At several hospitals for the insane in England and Scotland, where there are but 250 or 300 patients, there are two resident medical officers.

The assistant-physician at Bethlem would find plenty to occupy his leisure hours for the interests of the patients, in carrying out the directions of the superintendent, in directing the keeping of the case-books, and frequently in the day visiting the various wards, to all of which he should have unlimited access. A person holding such an appointment should not be an apothecary, his duties not peculiarly consisting in "dispensing and administering medicines, the extraction of teeth and administration of enemata, passing catheters and keeping accounts."

I would further suggest, that the position of the assistant medical officer should be second to no one in the establishment but the physician superintendent, such as is the case in most county asylums in England. He should superintend the duties of the subordinates engaged in the treatment of the insane; and, as the rules of the Wakefield Asylum have it, in the absence of the Director, "be the responsible manager of the Institution;" and, at the Northampton and Wilts County Asylum, he is required to visit every patient at least twice daily.

He should perform the *post-mortem* examinations, as the physician's assistants do in the London hospitals,—for instance, at King's College and University College, where there are physicians to prescribe, assistants to direct, and clinical clerks to observe and write.

A man well calculated to perform the duties of assistant medical officer at Bethlem with energy and zeal must be very necessary; and, without such a person, how is it possible for the case-books to be kept? To obtain all the information alone, where so many are regularly admitted and discharged, can be no small amount of labour. The physician could not do this; clinical clerks could not. It would, therefore, be the peculiar duty of the assistant-physician to attend to this.

The assistant medical official should be paid liberally, treated as a gentleman. His position should be similar to that of the assistant-surgeon in the army; and there would be no difficulty in obtaining candidates for this appointment who have distinguished themselves at the London schools, and, in addition, had experience in the modern treatment of the insane, and not prejudiced observers; surely it would be unfair to act otherwise.

I am, &c. AN EX-SUPERINTENDENT.

SUPERINTENDENTS OF COUNTY LUNATIC ASYLUMS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to ask a "A County Superintendent," whether he allows other officers of Asylums the same right of appeal to a committee of magistrates as he demands for himself?

It may be settled among the majority of superintendents of asylums that such a system should exist, as that proposed by your correspondent. But are they the only parties whose comfort should be studied? Every officer of an asylum should have as much opportunity of appealing to the Committee as the superintendent himself; and if that be granted it is not possible for that officer to sit at the Board.

I cannot agree with your correspondent in thinking, that one man should be delegated with so much power as is proposed by him.

Superintendents at the present time have sufficient power; and only increase this, and things will be worse.

If you visit asylums which work well, where there is unanimity among the officers, and a proper respect and feeling towards the officer in command, these will not be found to be those institutions where the superintendent is at once director, treasurer, superintendent, physician, house surgeon, etc. etc.

Such was the case formerly at Hanwell, but being found to be bad, it was abolished.

There is a great advantage, to my mind, in having a Committee which can be appealed to, and which will take the responsibility from the shoulders of one man. I am, Sir, &c.

JUSTITIA.

ON THE UTERINE SOUND.

[To the Editor of the Medical Times and Gazette.]

SIR,—Nothing could more forcibly illustrate the propriety of criticising the statements in respect to the practical value of the uterine sound, than the letter of Dr. Higgins, in the late Number of your journal (May 15). In an endeavour to repress various "abominations" in the treatment of uterine disease, "alike uncalled-for by the nature of the disease, and demoralizing to the female subjected to them without just cause," I examined the clinical facts contained in some papers "On Dysmenorrhœa, by Edward Rigby, M.D." I there showed, from Dr. Rigby's own words, that some, at least, of the published cases were not examples of the disease—obstructive dysmenorrhœa—which he considered to be present; that the diagnosis was erroneous; and that the treatment employed was uncalled-for, and hence improper. When examining these cases, I quoted the words of Dr. Rigby:—"The uterine sound passed more than 2½ inches;" but it appears the exact words are, "rather more than 2½ inches." Dr. Higgins points this out, and asks, "For what purpose is this inaccuracy,—this omission." I reply, For no purpose whatever—it was accidental. The words "rather," and "more," are of no value in the sentence; they may both be omitted, and the facts of the case will remain the same; that is, that when the uterine sound passes 2½ inches in the virgin uterus, it penetrates the internal orifice, and consequently this cannot be constricted and have occasioned obstructive dysmenorrhœa, as Dr. Rigby considered. Nay, not only may the words "rather more" be omitted, but the half inch even may be removed, and the facts will remain the same; for if the sound passes but two inches, it penetrates the internal orifice in the virgin uterus. This wish, then, to establish an improper "purpose" is unfortunate; but, while it fails in its aim, it shows the heedless manner in which this instrument is used, even by those who advocate its employment. They appear to overlook, that when the sound is introduced 2½ inches, it penetrates the full extent of the uterine cavities; that it is introduced more than half an inch further than can serve any practical object, even according to their view of the matter; and that this unnecessary "poking" of the cavity of the body of the uterus is fraught with much serious consequences to the patient, and attains no useful information.

Dr. Higgins says:—"The proper dimensions of the uterine sound, as given in my paper, (that is, one-eighth of an inch in diameter,) are not too large for a normal uterine canal." I, however, demur to this statement.

Neither the internal, nor even the external orifice of a healthy virgin uterus will admit an instrument one-eighth of an inch to pass through. But, as this is a point of measurement which can be readily determined during a *post-mortem* examination, or in the dissecting-rooms of London, I leave it to those interested in the question to decide for themselves. He adds, "The uterine canal, just as the male urethra, need not be entirely closed to produce serious functional derangements of the catamenial secretion." Now, granted that this proposition be correct, how does it bear upon the subject under discussion? The uterine sound passed 2½ inches; hence the canal was not "entirely closed," nor was it even partially closed; for, according to Dr. Higgins, the sound is not "too large for a normal uterine canal." Now, the inference from this is obvious, viz., that when the sound passes through the uterine canal, this canal is of its normal dimensions; that no obstruction to the flow of the catamenia would exist; that, under these circumstances, the diagnosis of "obstructive dysmenorrhœa" would be erroneous, and, consequently, the treatment directed to remove the imaginary obstruction uncalled for and improper. I am obliged for this confirmation of the statements I have advanced, and would suggest to Dr. Higgins the propriety of ascertaining with more precision the dimensions of the uterine canal before incurring the risk to his patients of unnecessary dilatation, or defending others who employ "blades made of well-tempered steel," or knives ingeniously contrived for the purpose of removing obstructions, which, according to their own showing, did not exist.

Dr. Higgins further adds, that I attempted to show his "treatment of obstructed dysmenorrhœa was as uncalled for, and, conse-

quently, as improper, as Dr. Rigby's;" that I insinuated,—what is nowhere stated,—that in this case he "passed the instrument through the uterine canal, which (he) did not do." Dr. Higgins is again in error. I did not insinuate that the sound passed through the uterine canal, but stated, that the bulb of the instrument was much too large to pass the os internum uteri in the healthy state, and, *à fortiori*, in a contracted condition; and, consequently, the sound "could not afford any indication of a constriction of this orifice." He adds, "For surely, as with the male urethra, a stricture, or contracted condition of this canal, may be ascertained, without penetrating the constriction, by the obstruction which the instrument receives at the narrowed part." Again is he wrong. The male urethra is, with slight variation, of the same diameter throughout, the narrowest part being at the orifice, and an instrument, once introduced, will pass along the whole canal. The uterine canal differs essentially from this condition. The external orifice is smaller than the canal of the cervix, and considerably larger than the internal orifice; so that, in the healthy state, an instrument which will enter at the external orifice is obstructed at the upper part of the cervical canal, where it becomes smaller to form the internal orifice. The analogy, then, between the urethral canal and the uterine canal will not hold good. It is surprising that practitioners do not make themselves acquainted with the healthy condition of the part, and thus avoid the error of mistaking a natural for a diseased state. I confess being unable to understand the meaning of the following:—"If the escape of a brownish, bloody coloured fluid, from a dilated os and cervix uteri, be not an indication of a canal (whether quite pervious or not) preternaturally and relatively too small for its purposes, I ask, what is it an indication of?" It is a strange contradiction, that the escape of fluid from an orifice and cervix uteri already known to be dilated should be considered to indicate the reverse of what was previously ascertained to exist. How can this be?

Possibly Dr. Higgins supposes, that it is an indication of a contracted state of the internal orifice; for he asks, "If this discharge be not evidence of retained menstrual fluid, what is it?" He appears not to know, that when an instrument is passed through the internal orifice of a healthy uterus, some blood almost always escapes, and, when congestion or chronic inflammation of the organ is present, the amount of hæmorrhage is much increased. This is the explanation of the "discharge," which is no evidence whatever of "retained menstroal fluid," but even evidence of a contrary nature, viz., that considerable risk is incurred by "poking" the uterus during these states, seeing that it is exactly in such cases that acute inflammation so often follows the use of the sound.

I have long thought that the use of the uterine sound must be based on some erroneous notions of those who employ it; but I was not prepared for so complete a demonstration of this opinion as the writings of Dr. Rigby and Dr. Higgins afford. These writings also show the necessity of examining the accuracy of published statements; for, although their fallacy is easily shown, yet, as a certain degree of specious argument prevails, they may deceive the unwary, and be the means of inflicting much practical mischief. May I not now add, that if no better reasons can be given for the employment of the uterine sound than they contain, this instrument will quickly fall into merited oblivion.

I am, &c. M.D. Londin.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

J. Hodgson, Esq., F.R.S., President, in the Chair.

ON SOME OF THE PRINCIPAL EFFECTS RESULTING FROM THE DETACHMENT OF FIBRINOUS DEPOSITS FROM THE INTERIOR OF THE HEART, AND THEIR MIXTURE WITH THE CIRCULATING BLOOD.

By WILLIAM SENHOUSE KIRKES, M.D.

[Communicated by Dr. BURROWS, F.R.S.]

As an introduction to the subject, the author observed, that it was a clearly-established fact, that the fibrinous principle of the blood might, under certain circumstances, separate from the circulating fluid, and be deposited within the vascular system, especially on the valves of the heart. The forms of fibrinous concretions to which the following observations especially applied, were, first, the masses usually described as Laennec's globular excrescences; and, secondly, the granular and warty growths adhering to the valves, and presenting innumerable varieties, from mere granules to large irregular fungous or cauliflower excrescences, projecting into the cavities of the heart. These growths, when once formed, whatever might be their origin, were full of peril, and would often remain so, long after the circumstances which gave rise to them had passed away. When of large size, or loosely adherent, they might at any time be detached from the valves, and conveyed with the circulating blood, until arrested within some arterial canal, which might thus become completely plugged up, and the supply of blood to an important part be suddenly cut off, from which serious if not fatal results would ensue; or, smaller masses might be detached, and pass on into arteries of much less size, or even into the capillaries, whence congestion, followed by stagnation and coagulation of the blood, and all the consequent changes such coagulated blood is liable to undergo in the living body, would necessarily follow. Many singular morbid appearances observed in internal organs, and not well accounted for, were probably brought about in this manner. Again, the masses of fibrin might soften, break up, and discharge the finely granular material resulting from their disintegration into the circulating blood, and, contaminating this fluid, might excite symptoms very similar to those observed in phlebitis, typhus, and other analogous blood diseases. Thus the fibrinous material detached from the valves, or any other part of the interior of the heart, might be the cause of serious secondary mischief. The parts of the vascular system in which these transmitted masses of fibrin might be found, would in great measure depend upon whether they were detached from the right or left cavities of the heart. Thus, if from the left, they would pass into the aorta and its subdivisions, and would be arrested in any of the systemic arteries or their ramifications, and especially in those organs which receive large quantities of blood direct from the left side of the heart, as the brain, spleen, and kidneys: on the contrary, if escaping from the right cavities, the lungs would necessarily become the primary, if not the exclusive, seat of their ultimate deposition. A division of the subject being thus naturally formed, the author proposed to consider the subject, first, as to the remote effects resulting from the separation of fibrinous deposits from the valves or cavities of the left side; and, secondly, as to the corresponding effects produced by the detachment of like deposits from the valves or cavities of the right side of the heart. The author then proceeded to elucidate the first branch of the subject, in which masses of some magnitude were detached from the left side, and arrested in an arterial channel of notable size. This pathological fact was illustrated by three cases, in many respects identical; for, in each, death appeared to ensue from softening of the brain, consequent on obstruction in one of the principal cerebral arteries, by a mass of fibrinous material, apparently detached from growths on the left valves. The first case was that of a female, aged 34, of pale and delicate aspect. She had suffered from rheumatic pains, and there was a loud systolic murmur heard over the entire cardiac region. While under treatment for these symptoms, she suddenly fell back as if fainting. She was found speechless, with partial hemiplegia of the left side, but there was no loss of consciousness. The hemiplegia increased, involved the face and limbs, and gradually became complete in regard to motion; but sensation remained unimpaired. These symptoms lasted five days, when she died quietly. The *post-mortem* examination developed much congestion of the pia mater, amounting, in some places, to ecchymosis. The right corpus striatum was softened to an extreme degree, being reduced to a dirty, greyish-white pulp. In the posterior lobe of the right cerebral hemisphere was a similar spot of pale softening. The right middle cerebral artery, just at its commencement, was plugged up by a small nodule of firm, whitish, fibrinous-looking substance, not adherent to the wall, but rendering the canal almost impervious. The vessels of the brain were generally healthy, except a yellow spot or two in the coats of those at the base of the brain. The heart was enlarged; several broad white patches externally. The right valves were healthy, so also were the aorta; but the mitral valve was much diseased, the auricular surface being beset with large warty excrescences of adherent blood-stained fibrin. The right common iliac artery, about an inch above the origin of its internal branch, was blocked up by a firm, pale, laminated coagulum, which extended into the internal iliac. The pleuræ were adherent in places; liver and intestinal canal healthy; spleen large, pale, and soft, containing a yellowish-white, cheesy substance. The kidneys were pale, rough, and granular; within the cortex of the right were several large masses of yellow deposit, surrounded by patches of redness. Death had resulted, in this case, from the softening of a large portion of the right side of the brain, which the author considered to have arisen from an imperfect supply of blood, consequent on the middle cerebral artery of the same side being obstructed by a plug of fibrin. The author then discussed the sufficiency of such an

obstruction to produce the effects ascribed to it, and he brought forward many examples showing that atrophy and disorganisation usually resulted from any circumstance which materially impeded, or entirely cut off, the supply of blood to a part. The author then directed attention to the probable source of the fibrinous plug found in the middle cerebral artery. The suddenness of the cerebral symptoms rendered it probable, that the blocking up of the artery was equally sudden, and not the result of gradual coagulation of the blood within the vessel. The absence of all local mischief in the coats of the artery at the point of obstruction, as well as elsewhere, pointed to some other than local origin for the clot; and the author, at the time of the examination, formed the opinion, that a part of the fibrinous deposit on the mitral valve had become detached, and carried by the stream of blood, until arrested at the angle whence the middle cerebral proceeded. This explanation suited equally for the plug found in the common iliac; for it was quite conceivable, that portions of the loosely adherent fibrin might be easily detached by the stream of blood washing over the mitral valve, and, when once admitted into the circulating current, they would only be arrested by arriving at a vessel too small to allow their transit along its canal. Two other cases were described by the author, possessing many interesting points of resemblance: one, a female, aged 24; the other, a male, of the same age. Both were admitted into the hospital with hemiplegia of the left side; each had heart disease, indicated by a loud systolic murmur. The *post-mortem* examinations revealed the following morbid appearances common to both:—Softening of a limited portion of the brain, producing death by hemiplegia; obliteration of the cerebral artery supplying the softened part; coagula in one of the iliac arteries; fibrinous deposits in the kidneys and spleen; and the presence of fibrinous warty excrescences on the valves of the left side of the heart. So many and such rare features of resemblance could not fail to demonstrate a very close connexion between the several morbid appearances so exactly reproduced in each case. The author believed, that these three cases satisfactorily established the two following conclusions:—1st. That softening of a portion of the brain, with attendant loss of function, might result from obstruction of a main cerebral artery by the lodgment of a plug of fibrin within its canal. 2ndly. That the foreign substance thus obstructing the vessel was probably not formed there, but was derived directly from warty growths situated on the left valves of the heart. The author thought it not improbable, although in the absence of direct proof it was but supposition, till further investigation confirmed these facts, that many cases of partial and temporary paralysis suddenly ensuing in one or more limbs of young persons, especially if accompanied with signs of cardiac disease, might be due to interruption of a proper supply of nutriment to the brain by the temporary plugging up of a principal cerebral artery by fibrin, detached from a diseased valve on the left side of the heart. Other arterial branches besides those of the base of the brain, might arrest these fibrinous deposits derived from the valves of the heart. In cases 1 and 2, coagula were found in the iliac and femoral arteries; and in Case 3, in the renal. The author thought that many specimens found in museums, and supposed to illustrate the spontaneous coagulation of the blood, or the deposition of fibrin within a limited portion of an arterial trunk, were probably to be referred to the same cardiac origin; and he illustrated the point by reference to a preparation in the museum of St. Bartholomew's Hospital. The second subject of inquiry consisted of an examination into the effects produced by smaller portions of fibrin detached in a similar manner, but arrested in the minute arterial branches, or even in the capillaries. The author thought that the singular masses of yellow fibrinous substance found in the spleen and kidneys, and other organs, and hitherto described as "capillary phlebitis," "metastasis," or "fibrinous deposits," were derived from this cause. Out of twenty-one cases in which the author had observed these deposits in the spleen and kidneys, or other parts deriving blood directly from the left side of the heart, in nineteen there was disease of the valves, or of the interior of the left side of the heart. In fourteen of these there were fibrinous growths on the surface of the left valves; in the remaining five there was simple mention of valvular disease. The author thought, that the mere fact of so large a number of cases of so-called "capillary phlebitis" being associated with the presence of fibrinous deposit on the valves of the heart, suggested a very close relation between the two morbid states. The author then entered upon the third branch of this part of the subject, concerning the series of effects which might result from the introduction of fibrinous particles into the circulating blood, manifesting phenomena indicative of the existence of a morbid poison in that fluid. A case was related of a youth, aged fourteen, admitted into the hospital with obscure typhoid symptoms, the surface of the body being covered with petechiæ. Delirium, with much febrile prostration, followed; he became subsequently comatose, and died. Upon examination of the body, the surface was found covered with petechiæ. The pia mater was infiltrated with what seemed recently effused blood. The surface of the brain thus presented a blotchy appearance, and, amid these spots, were yellow-coloured patches of various size; some were of a greenish-yellow hue, and had the appearance of being smeared over with pus. The brain was unduly congested, and some ecchymosis near the surface; the cerebral arteries and sinuses healthy; several petechial spots on the surface of the heart, as well as in the cavities; and, on the auricular surface of the mitral valve, some white fibrinous vegetations, very soft and friable; a like deposit on the aortic valves, with evidences of ulceration; several yellow masses of fibrinous deposit on the surface of the spleen; cortical part of the kidney covered with minute petechial spots, in the centre of which was a buff-coloured dot; several large yellowish blotches extended deep into the substance of the cortex. The intestinal mucous surface was covered with petechial spots, which were apparent also on the mucous membrane of the bladder, pharynx, œsophagus, stomach, larynx, and trachea. The author considered the mystery of this case cleared up by the post-mortem examination. The attack had been ushered in by a severe pain in the right groin, which was rheumatic; then ensued rheumatic inflammation of the mitral and aortic valves, with ulceration of the latter, and deposition of fibrin. From these deposits portions had probably separated during life, and were transmitted with the blood to all parts of the body; and, being arrested in the capillary networks and smaller arteries, produced the various petechial and buff-coloured spots above described.

The second part of the paper related to the effects which might result from the detachment of fibrinous deposits from the right valves of the heart. Reference was made by the author to a paper on the Formation of Coagula in the Pulmonary Artery, by Mr. Paget, published in the "Transactions" of the Society, as well as to a specimen in the museum of St. Bartholomew's Hospital, in which there was deposition of fibrin on each of the pulmonary valves, with old coagula filling many of the branches of the pulmonary artery. In this case several large, solid, fibrinous masses were found in the substance of the lungs, presenting appearances not unlike portions of old pulmonary apoplexy. Lastly, the author recapitulated the principal points which he was desirous of establishing, viz.,—1st. That fibrinous concretions in the valves of the heart admit of being readily detached during life. 2ndly. That if detached and transmitted in large masses, they may suddenly block up a large artery, and thus cut off the supply of blood to an important part; if in smaller masses, they might be arrested by vessels of smaller size, and give rise to various morbid appearances in internal organs; or the particles mingled with the blood might be but the debris of softened fibrin, yet with power to produce a poisoned state of the blood, and bring on typhoid or phlebitic symptoms. 3rdly. That the effects produced and the organs affected would be in great measure determined by the side of the heart from which the fibrinous material had been detached: if from the right side, the lungs would bear the brunt of the secondary mischief; but if, as was most commonly the case, the left valves were the source, the mischief would be more widely spread, and might fall on any part, but especially on those organs which were largely and directly supplied with blood from the left side of the heart, as the brain, spleen, or kidneys.

Mr. Barlow said, that although his opinion could be of no value to the author, he could not but congratulate him on the ability, originality, and importance of his paper. Every one was aware, that, in spite of all that research had accomplished, it was still difficult, nay, impossible, to explain many cases of softening of the brain. It often happened, that a theory, even if admitted, was far from meeting all the difficulties of the case; but the contrary was to be said of that proposed ingeniously by Dr. Kirkes in reference to the examples which he had brought forward. The facts certainly concurred very pointedly indeed to favour and support the view which had been suggested,—there was the time of life of the patients which precluded the idea of atrophy from age,—there was the absence of any arterial disease or degeneration,—there was the proved obstruction by a small mass of fibrin which blocked at a point the vessel leading to the part destroyed, and that mass might clearly have been carried from the heart, as was obvious from the condition of its valves, and placed there. He had examined one of the preparations on the table, showing a blocking-up of the middle cerebral artery, and that appeared to him to have been caused in the manner suggested by the author. Of course, the explanation which had been given of ramollissement only applied, and was intended only to apply, to special cases,—cases such as those contained in the paper. What had been observed respecting the want of anastomosis of vessels conducing to the anemia, atrophy, and death, which

occurred in these cases, derived illustration and support from what had been already shown by Dr. Quain respecting that circumscribed atrophy and degeneration of the heart, which were commonly owing to occlusion or narrowing of the coronary arteries. The form of ramollissement which they were considering more resembled that which ensued occasionally from ligature of the carotid than any other; for, even if they selected the case of mere narrowing of an artery, and consequent softening, they had still to explain the cause of the degeneration of the particular vessel by the obstruction of which the mischief was occasioned; but in the instances before them, there was a simple mechanical cause of obstruction, the source of which was obvious, than which, as to its action, nothing could possibly be easier to understand. There were many other points which invited remark; but he would not venture a longer comment on this highly valuable addition to pathology.

Dr. Wrench was not disposed to go beyond the first series of phenomena, which he thought were fully proved. He could not admit, that the 2nd, 3rd, and 4th were equally satisfactory. He considered, that the effects with reference to the spleen were owing to hæmorrhage into the organ, and the same with the lungs. The results were owing to effusion; and he thought it straining the point, to refer them to the arrest of particles of lymph in the smaller vessels.

Dr. G. Burrows wished to add his testimony to the facts detailed in the paper. With respect to the second series, all the details are most accurate. In fact, the whole details are given most correctly. He had arrived at the same conclusion as the author, and attributed these cases of softening of the brain to the sudden arrest of the circulation in the vessels. He remembered the great controversy, about twenty or thirty years ago, as to the cause of ramollissement of the brain. Abercrombie attributed it to inflammation,—a view supported by Lallemand, but subsequently the publication of Rostan's work caused Abercrombie to believe, that in some cases, at least another cause might be in operation, and that defective nutrition might lead to the same result as inflammation. Not one of these writers seems to have discovered the state described by our author as in any way causative of the ramollissement. It was left for Dr. Kirkes to discover. The celebrated Andral, in his *résumé* on cerebral softening, after referring some cases to one cause, and some to another, says, that there are still some for which no cause can be assigned; they are *sui generis*. When these cases occurred in St. Bartholomew's Hospital, he (Dr. Burrows) referred to works on the subject, and found there were three cases on record which resembled them that is, sudden hemiplegia, lasting days or weeks, and after death a limited softening of the corpus striatum, optic thalamus, etc., together with valvular cardiac disease or with an aneurism of the aorta. Andral does not mention any diseased state of the cerebral arteries, nor does he allude to heart-disease as connected with the ramollissements; but he (Dr. Burrows) after hearing the paper read, and after seeing the cases, could not help connecting them together. Every one must have seen cases such as had been described. He was called, some time ago, by Dr. Hertford, of Chertsey, to see a lady, who, after protracted ill-health, (she was supposed to be consumptive,) had been afflicted suddenly with hemiplegia. The heart was diseased; there was a loud rasping systolic murmur heard all over the heart and aorta. The patient was brought to London and died here, but no *post-mortem* examination was made. This occurred five years ago, and, from Dr. Kirkes' paper, he was led to conclude, that the paralysis depended on some accidental detachment of fibrin. He was fully of opinion, that the statements in the paper respecting cerebral softening were fully proved, but he did not think the other points so clearly ascertained. They opened a wide field for investigation.

Some further remarks were offered by some Fellows of the Society, after which the meeting was adjourned.

CHEMICAL SOCIETY.

The only paper read was on a Method of Detecting the Presence of Alum in Bread and Flour.

Dr. Hofmann made a few observations on Liebig's new test for urea. No further practical information on this subject was, however, furnished than is contained in our previous notice of this test. It was suggested that a difficulty might occur in obtaining in all cases such a correct normal solution of per nitrate of mercury, used as the test liquor, as would be desirable.

Mr. Redwood exhibited a sample of aloe juice (inspissated), some of which has lately been imported, and suggested its employment as a source of aloine.

The Secretary then exhibited a specimen of a new salt of quinine, discovered by Mr. W. B. Herapath, possessing the power of polarizing a ray of light like tourmaline, and, at certain angles of rotation, of depolarizing it like selenite. Upon dropping tincture of iodine into a solution of disulphate of quinine in diluted sulphuric acid, an abundant deposition of brilliant emerald-green crystals is obtained. It was, however, found exceedingly difficult to experiment in a satisfactory manner upon the crystals thus formed, as it was almost impossible to isolate them from their mother liquor. It was subsequently found, that by dissolving the disulphates of quinine and cinchonine of commerce in concentrated acetic acid; upon warming the solution and dropping into it a spirituous solution of iodine, carefully by small quantities at a time, and placing the mixture aside for some hours, large brilliant plates of this substance were produced. These could be readily separated from their mother liquor, and, by frequent re-crystallisation, purified. The crystals of this salt, when examined by reflected light, have a brilliant emerald-green colour, with almost a metallic lustre; they appear like portions of the elytra of cantharides, and are also very similar to murexide in appearance. When examined by transmitted light, they scarcely possess any colour; there is only a slightly olive-green tinge; but, if two crystals crossing at right angles be examined, the spot where they intersect appears as black as midnight, even if the crystals be not 1-500th of an inch in thickness. If the light used in this experiment be in the slightest degree polarized, as by reflection from a cloud, or by the blue sky, or from the glass surface of the mirror of the microscope placed at the polarizing angle 56° 45′, these little prisms immediately assume complementary colours. One appears green and the other pink, and the part at which they cross is a chocolate or deep chesnut brown, instead of black. Their chemical characters are as follow: — They are immediately redissolved upon heating the acid liquor to 180° and recrystallize on cooling. Boiling alcohol readily dissolves them, and a clear orange-yellow solution results; this, on cooling, deposits crystals in abundance, having the same optical and chemical characters, but they have lost the prismatic form, and now appear as rosettes of minute hexagonal plates, or forms derived from the hexagon by truncation of the angles. Cold alcohol does not dissolve them. Sulphuric ether and chloroform appear to have no power over the crystals. Ammonia rapidly decomposes them; this power is greatly increased by heat. A colourless solution results, and an opaque Naples-yellow precipitate remains, which is fusible at the boiling temperature of the ammoniacal liquid. A deep brownish-yellow resinous mass results; this is a compound of iodine and the alkaloid. Liquor potassæ has the same action on these crystals, but the resulting resin is deeper in colour, being now a chocolate brown. The alkaline solutions in both instances contain sulphuric and hydriodic acids.

CONTRIBUTIONS TOWARDS THE HISTORY OF TANNIC ACID.

By DR. STRECKER.

Communicated by Dr. Hofmann.

The author states, he has ascertained that tannin, when acted on by acids, yields sugar in addition to gallic acid, so that, henceforth, tannic acid may be classed with the conjugated sugar compounds. If tannic acid be thrown down from a pure solution with sulphuric acid, the precipitate boiled with water or very dilute sulphuric acid, the solution neutralised with carbonate of lead, the gallic acid now present, precipitated with acetate of lead, and the excess of this precipitant removed by sulphuretted hydrogen, the liquor, on being evaporated, will yield a syrupy residue possessing all the properties of sugar modified by acids. The author states, that he has not yet determined the quantity of sugar that is produced by a known weight of tannic acid, but suggests that the composition of tannic acid will probably have to be represented by the formula (C_{40} H_{18} O_{26}); and the transformation which tannic acid undergoes under the circumstances alluded to, would then be shown by the following equation:—

$$C_{40}\ H_{18}\ O_{26} + 10\ HO = 2\ (C_{14}\ H_8\ O_{12}) + C_{12}\ H_{12}\ O_{12}.$$

ON THE DETECTION AND QUALITATIVE SEPARATION OF TIN, ANTIMONY, AND ARSENIC,

AND ON THE RELATION EXISTING BETWEEN THESE METALS AND OTHERS WHICH ARE PRECIPITATED FROM THEIR ACID SOLUTIONS BY SULPHURETTED HYDROGEN.

By CHARLES L. BLOXAM.

After a few prefatory remarks, and a review of the principal methods hitherto proposed for effecting the object in view, the author proceeded to describe the method which he has been led to adopt, which consists in treating the precipitated sulphides of arsenic, antimony, and tin, with solution of sesquicarbonate of ammonia, which dissolves the sulphide of arsenic, and part of the sulphide of tin; the arsenic is detected in the precipitate, thrown

down from the solution by hydrochloric acid, by the test of Fresenius and Boho, while the tin is sought for in another portion of the same precipitate, by deflagrating it with nitre, precipitating the aqueous solution of the fused mass with nitric acid, reducing the tin from the precipitate by fusion with cyanide of potassium, treating the reduced metal with hydrochloric acid, and testing the solution for protochloride of tin with perchloride of mercury. Antimony and tin are detected in the precipitate left undissolved by sesquicarbonate of ammonia; this precipitate is dissolved in nitro-hydrochloric acid, and the solution boiled with excess of sesquicarbonate of ammonia, when the whole of the tin is precipitated, and part of the antimony remains in solution; the tin may be discovered by reducing the precipitate as above described, and the antimony may be precipitated as sulphide by acidulating the solution with hydrochloric acid, and passing sulphuretted hydrogen.

Some curious facts were stated respecting the insolubility of bisulphide of tin in sulphide of ammonium, in the presence of sulphides of copper and tin. Methods were described by which these difficulties may be overcome.

All the processes mentioned in the paper were verified by experiments upon mixtures containing known quantities of the various metals.

MEDICAL NEWS.

Conversazione at the Royal College of Physicians.—The President and Fellows of this College, stimulated by the success which attended their exertions last year, entertained, on Wednesday evening, a numerous body of visiters composed of the *élite* of the scientific and literary world; thus keeping pace with the gigantic social stride which rendered memorable the year 1851, and will stamp it in all future records as an epoch in the history of civilization. The salutary effect of these meetings must be patent to every one interested in the progress of ethics and philosophy, and affords an unmistakeable illustration of the spirit of the times, tending to a more generous fusion of those whom talent, guided by the same unerring principle of right, should morally place on the same footing. Gladly do we recognise this movement of the Royal College of Physicians, dictated alike by principle and policy, and sure we are, that when the sciences are as cordially blended and as ably represented as they were on Wednesday night, they cannot but leave on the mind an impression both permanent and effective. We must only remark, that the well known hospitality of the College was rather extended than diminished, and the appointments gave universal satisfaction, the excellence of which was identified with the caterers, Messrs. Staples, of the Albion. Among the visiters we observed—Lord Londesborough, Lord Headley, Lieutenant-General Sir Archibald Maclaine, Sir George Staunton, Sir Fortunatus Dwarris, Sir Charles Fellows, Sir Richard Kindersley, Sir George Clerk, Dean of Salisbury, Archdeacon Thorpe, Archdeacon Hale, Signor Di Vieenzi, Baron Parke, Justice Creswell, Serjeant Goulburn, Serjeant Stork, Mr. Wilcocks, Q.C., Professor Brande, Professor Grant, Professor Mitchell, Dr. Jelf, Professor Sedgwick, the President of the Royal College of Surgeons, Vice-President of the Royal College of Surgeons, the Revs. Robert Hawkins, Edward Monro, W. Babington, H. L. Majendie, John Jackson, E. B. Hue, — Mackenzie, and a number of the most eminent and distinguished medical men of the Metropolis.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 4th inst.:—

Clarke, J., London.
Hillas, Thomas, Brompton, Middlesex.
Longton, Edward John, Southport, Lancashire.
Naylor, George, Hon. East India Company's Service.
Reynolds, Robert, Debach, Suffolk.
Royston, Charles, Harrow-road, Paddington.
Simpson, Benjamin, Dublin.
Snell, William, Neston, Cheshire.
Stiles, Henry Tournay, Spalding, Lincolnshire.

Board of Accoucheurs.—The Council of the Royal College of Surgeons have just announced their intention to appoint a Board for the examination of candidates in midwifery, to consist of two gentlemen selected either from the Royal College of Physicians or Surgeons (*vide* our Advertising columns).

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 27, 1852:—

Bockett, William Charles.
Ducket, Clark Armstone, Quadring Eaudike, Lincoln.
Edmunds, John, Bangorwood, Flintshire.
Hancock, John, Wolstenholme, Bolton-le-Moors.
Harris, Charles, Northiam, Sussex.
Yelf, Leonard Keatley, Ryde, Isle of Wight.

3rd June:—

Ellery, Henry James, Truro, Cornwall.
Kingsford, Charles Dudley, Wellington-st., Southwark.
Lawrence, Benjamin Richard, Cheddar, Somerset.
Mushet, William Boyd, Coventry.

Obituary.—On the 2nd of April, Dr. Davidson, of the 43rd Regiment of infantry, killed in action with the Caffres. On the 26th ult., at Bideford, North Devon, Henry Charles Boisragon, M.D., late of Cheltenham. On the 4th inst., at Cary House, Torquay, Henry Parkin, M.D., aged 59. On the 1st inst., at Watford, Herts, in the 40th year of his age, John Smith, Esq., surgeon, sincerely regretted by all who knew his private worth and great kindness of heart.

The Capture of Lagos.—Death of Mr. Richard Carpenter, of the Penelope.—Those who have read the despatches of Commodore Bruce, relating to the bombardment of Lagos, on the West Coast of Africa, may remember the enlogistic testimony borne by that Commander to the members of the Medical Profession engaged in the action, for their skill and gallantry in rendering succour to the wounded, under circumstances of more than usual danger; many of them having accompanied the boats exposed to the hottest fire of the enemy. Foremost among the names so honourably distinguished was that of Richard Carpenter, of the Penelope, who, being the senior surgeon of the expedition, might have remained in his ship, and avoided danger. Preferring, however, honour to safety, he volunteered for the fight, and was in the boat of the Teazer, in which 14 were killed and 62 wounded, many of the latter to die soon afterwards. We have this day the painful duty to record his death. Having braved the malaria of the West Coast on a former commission, he sank under a second and more severe trial; and the tenement of his noble spirit has been lowered into the deep. As surgeon, or as messmate, his frank and generous bearing won for him the esteem and love of all with whom he sailed; nor was he less a favourite on shore, as he can tell who writes these lines. Peace be with him. He died homeward bound, May the 5th, aged 44, having served his country upwards of twenty years.

University of Cambridge.—At a congregation of this University, held lately, H. J. Haviland, of Pembroke College, and Robert Martin, of Caius College, were admitted as licentiates in medicine.

University of London.—Sir R. Inglis, in the House of Commons the other night, said that the University of London was "worse than sectarian, for it was nothingarian. (A laugh.)" And thus a clever and learned man seeks to run down a university by a bad joke, because, erected for the advancement of science, it does not, like the older universities, exclude Dissenters, etc., from its honours and dignities. *Proh pudor!*

Royal Institution.—The meetings of this institution for the present season will close on next Monday, with Dr. J. Conolly's concluding lecture on insanity, in the after-noon, at three o'clock.

Naval Appointments.—Surgeon William Gunn, M.D., (1835), from the Boscawen, 70 Guardship in Ordinary at Chatham, to be Medical Storekeeper at the Victualling-yard, Deptford.

Royal West Middlesex Regiment of Militia.—Nicholas M'Cann, gent., to be surgeon.

St. Mary's Hospital, Paddington.—The Anniversary Festival of this Charity was held recently, at the London Tavern, the Earl of Carlisle in the chair. The noble Chairman strongly advocated the claims of the hospital for public support. At present, only 120 beds are in use. The sum required annually for 150 is 4,400*l*. 725 in-patients have been admitted since the opening, and 1985 out-patients; 1087 casual cases, 228 poor married women attended at their own homes, and making altogether between 4000 and 5000 who have received relief from the hospital officers. The present certain income annually is only 1613*l*.; the balance at the

banker's is 1688*l.*; a debt of 3500*l.* being still owing for the building expenses, and 300*l.* more are required to clear off the debt for furnishing. The sum subscribed in the course of the evening amounted to 3300*l.*

St. Thomas's Hospital.—On Friday, May 21st, a public meeting of the students of this hospital was held in the large theatre, at one o'clock, for the purpose of presenting Mr. Rainey, the able and talented Senior Demonstrator of Anatomy, with a testimonial indicative of their regard for his private worth, and the zeal at all times displayed by him in imparting instruction to his pupils. Mr. Simon kindly took the chair; and Mr. Carpenter, the senior house-surgeon, in an eloquent and effective speech, presented Mr. Rainey, on behalf of the subscribers, with one of Ross's finest microscopes. Mr. Rainey—who seemed to be much affected by the kindness displayed towards him—replied, in a touching speech, which was much applauded throughout, thanking them for the honour they had done him by the presentation of such a valuable testimonial. He also thanked Mr. Carpenter for the kind allusions he had made, and concluded by hoping, that the testimonial would be a fresh incentive to him for arduous study, and trusted that he should see all his pupils, wherever they might be, enjoying prosperity and happiness. Votes of thanks to Mr. Lankester, the senior prizeman of the third year, for originating the idea of the testimonial, and to Mr. Simon, for his kindness in taking the chair, were carried by acclamation.

Western Dispensary for Diseases of the Skin.—A public meeting of the subscribers to this Institution was held at the Dispensary, 21, Goodge-street, on Monday, the 7th inst., for the purpose of receiving the first Half-yearly Report of the Committee; the Rev. Thomas Dale, M.A., Vicar of St. Pancras, President of the Institution, in the chair. The Report, which was read by the Secretary, stated, that, during the last six months, 122 patients had been entered on the books, and 47 had been discharged cured; the greater proportion of the remainder being still under treatment, having received much benefit; and that no case had as yet been discharged incurable. Resolutions were passed for adopting and publishing the Report, and for according the thanks of the meeting to Mr. Hunt, the surgeon to the Dispensary; and to the Rev. President. Several distinguished members of the Profession were present on the occasion.

Provincial Medical and Surgical Association.—The first annual meeting of the Midland branch was held in Nottingham on the 3rd inst., and was numerously attended. The Chairman, Dr. Williams, of Nottingham, delivered an elaborate and interesting address, in the course of which, after adverting to the talents of his predecessor, Dr. Bent, and explaining the objects of the Association, he took an extended view of the diseases most usually prevalent in Nottingham, its rate of mortality being the highest of any town in England, of the sanitary measures adopted to restore it to a healthy state, and also of the charitable, medical, and scientific institutions in the town. He spoke in the highest terms of Dr. Marshall Hall, whose discoveries, he said, threw a bright lustre upon his native town, of which they might well be proud. In conclusion, he adverted to homœopathy, hydropathy, and other systems of quackery, encouraging his audience to denounce such things as "a mockery, a delusion, and a snare." A vote of thanks to the president was carried unanimously; after which, Mr. J. White read a paper on the Medical Topography of Nottinghamshire; Mr. Simpson, "a description of a tumour in the male breast," etc. In the evening the members dined together, under the presidency of Dr. Williams.

Geological Society.—The following papers will be read at the meeting of this Society on Wednesday evening:—1. On the Silurian Rocks and Auriferous Quartz of the South of Scotland. By R. Harkness, Esq. 2. On Protruded Ludlow Rock at Hagley Park, Herefordshire. By H. E. Strickland, Esq., F.G.S.

Mr. Flower, who has been for twenty-two years surgeon to the P division of police, has received from the officers and men of that section, by the hands of Inspectors Maude and Emmerson, a testimonial of gratitude for his professional services, consisting of a massive silver inkstand, with rich cut glass bottles, a wax taper stand, and a gold pen and holder, all in a handsome morocco and velvet case. On the upper raised edge of the inkstand, is the following inscription:—"Presented to J. S. Flower, Esq., of the P division of Police, as a tribute of respect for his prompt and kind attention on all occasions as their medical officer." On the lower edge are the arms and crest of Mr. Flower, handsomely engraved; with his initials and the date of presentation.

Denmark has lost another great man, a philosopher of European reputation, State-Councillor Professor J. F. Schoul, one of the first botanists of the age. He was in his sixty-fourth year at the time of his decease.

Fees Allowed to Medical Witnesses for Attendance at Assizes and Sessions.—The following Petition has been forwarded to G. Sanders, Esq., M.P., by the Medical Practitioners of Wakefield, for presentation to the House of Commons, and also a Memorial to the Lords of the Treasury, embodying the substance of the same. "To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled. The respectful Petition of the undersigned physicians and surgeons practising in Wakefield and its vicinity in the West Riding of the County of York, sheweth,—That your petitioners are frequently called upon to attend at assizes and sessions, to give evidence in criminal prosecutions. That the questions on which they are required to give evidence, generally involve, not only matters of fact, but also matters of opinion. That to qualify themselves for giving sound opinions on such questions, they are compelled to undergo a long, laborious, and expensive course of study. That the position they occupy as witnesses is one of extreme difficulty and anxiety. That, for the purpose of giving evidence, they are frequently compelled to travel long distances from home, and to be absent from practice for several days consecutively, at considerable personal inconvenience and pecuniary loss. That the fees allowed to medical witnesses for attending at assizes and sessions have been, of late years, reduced from two guineas per diem to one guinea per diem. That the reduced scale of fees barely reimburses a medical man for his necessary expenditure when from home, and leaves him no remuneration for the exercise of his professional knowledge, anxiety, and loss of time. That it is within the knowledge of your petitioners, that on account of this inadequate scale of remuneration, medical men have declined to attend cases in which it was probable that proceedings in a criminal court might ensue, and that they have done this to avoid being subsequently called as witnesses. That occurrences of this nature are likely to prove injurious to the poorer classes of society, and tend to frustrate the ends of justice. That your petitioners beg your honourable House to grant such redress as may seem fit. And your petitioners will, as in duty bound, ever pray. J. G. Wright, Chairman; John Horsfall, Surgeon; J. Bennett, Surgeon; J. G. Atkinson, M.D.; W. Statter, Surgeon; Wilson Beaumont, M.R.C.S.; Thomas Walker, Surgeon; Thomas Ross, Surgeon; William Wood, M.D.; W. R. Milner, Surgeon; E. Walker, Surgeon; Samuel Marshall, Surgeon; E. Walker, Jun., Surgeon; Francis Horsfall, Surgeon; Benjamin Walker, Surgeon; Benjamin Kemp, Surgeon; William Dawson, Surgeon; Samuel Secker, Surgeon; D. B. Kendell, M.B., Cantab.; Henry Dunn, Surgeon; Samuel Holdsworth, M.D.; John Burrell, Surgeon; John Dawson, L.S.A.L.; John James Bird, Surgeon; C. Jewison, Surgeon; R. Craven, M.D.; Wm. W. Kemp, Surgeon; G. F. Naylor, M.R.C.S.; John Hirst, Surgeon; A. Jessop, Surgeon.

A proposal is on foot to establish a General Dispensary in Tiverton, Devonshire.

The Lunacy Act.—On the 6th instant, Mr. Henry Baker, of 21, Doris-street, Lambeth, was summoned before the magistrates at Lambeth Police Court, to answer to a charge preferred against him by the Commissioners in Lunacy, for keeping a house for the reception of lunatics without having been duly licensed. Mr. Campbell, one of the Commissioners, proved searching the defendant's house, under a warrant from the Lord Chancellor, and finding there two lunatic patients, and learning further, that a third patient, then out, was also kept in the house. Mr. Jaffree, surgeon, proved having attended these patients, and that they were all lunatic or idiotic. The Secretary to the Commissioners gave evidence that the house was unlicensed. An appeal *ad misericordiam* was made on the part of the defendant, but was not listened to, and he was bound over to answer the charge at the Central Criminal Court. The offence is considered a misdemeanour in the eye of the law.

Charity for Hospital Purposes.—The Devon and Exeter Hospital has recently had two munificent donations added to its funds—one of 2,000*l.* left by the late Rev. Dr. Troyte, late of Huntsham, and the other by the late Mrs. Halford, of Newcourt, near Exeter, who, after giving specific legacies, amounting to 60,000*l.*, has bequeathed the whole residue of her property to this Institution. It will amount, it is said, to nearly 50,000*l.* 20,000*l.* of this will not be available, however, till the decease of the husband of the testatrix, as he has a life interest in it. Mrs. Halford has also left legacies of 1,000*l.* each to the following Charities:—The Exeter Dispensary, West of England Eye Infirmary, West of England Institution for the Deaf and Dumb, and West of England Institution for the Instruction of the Blind. Mr. Dixon has presented 30*l.* to the Royal Orthopædic Hospital. Among the contributions to its building fund, we find that Mr. Cramp has given 105*l.*, and Messrs. Overend, Gurney, and Co., 50*l.*

PROGRESS OF EPIDEMICS.—The small-pox has begun to abate somewhat in the parish of Trelawny, Jamaica. The advices from the other parishes are more disheartening. There is not a parish in the island, in which, it is feared, the epidemic will not break out. The weather is very sultry, and the want of rain is very severely felt, especially in the country parishes. Horned and other stock have suffered to a large extent, and several deaths have occurred among them in consequence. In Jamaica, the measles have also made their appearance, several cases having been reported from the parishes of St. Anne and Trelawny. In Kingston, also, there have been several cases, and, in many instances, small-pox and measles have attacked the same patient. In general, however, the cases are distinct, and particularly mild. Hooping-cough and measles prevail extensively throughout Barbadoes, but the island is free from other diseases.

DEATHS *in the Metropolis for the week ending Saturday, June 5*, 1852.

CAUSES OF DEATH.	JUNE 5. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	481	335	184	1000	8770
SPECIFIED CAUSES	478	335	182	995	8716
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	198	40	8	246	1915
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	25	15	45	472
3. Tubercular Diseases	62	120	13	195	1880
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	48	30	28	106	1113
5. Diseases of the Heart and Blood-vessels	3	26	12	41	276
6. Diseases of the Lungs and of the other Organs of Respiration ...	55	29	42	126	1037
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	35	27	14	76	541
8. Diseases of the Kidneys, &c. ...	...	6	3	9	103
9. Childbirth, Diseases of the Uterus	...	9	...	9	86
10. Rheumatism, Diseases of the Bones, Joints, &c.	...	6	...	6	86
11. Diseases of the Skin, Cellular Tissue, &c.	1	...	1	2	6
12. Malformations	4	...	...	4	27
13. Premature Birth and Debility ...	22	...	...	22	204
14. Atrophy	26	...	1	27	167
15. Age	...	...	38	38	459
16. Sudden	2	...	1	3	91
17. Violence, Privation, Cold, and Intemperance	17	17	6	40	253
CAUSES NOT SPECIFIED	3	...	2	5	54

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—A patient of mine applied to me the other day, to know if he might consult the person whose advertisement I enclose. I told him, I certainly could not recommend him to do so as, on reference to the "Medical Directory," I could not find any such name. He then drew my attention to the latter part of the advertisement, purporting to be an endorsement of his qualifications, quoted from your Journal, which rather staggered my previous opinion, as I did not at the moment observe, that the title of your paper is so modified as to mislead any one not of the Profession. A notice of this in your next Number will oblige, I am, &c. D.E.A.F.

Leicester.

[The advertisement forwarded by our correspondent is that of a person professing to cure all kinds of deafness by a novel and curiously rapid process; and, subjoined to the advertisement, is a laudatory notice, said to be extracted from the "*Medical Gazette and Times*." Of course, no such notice appeared in this Journal, and there is no journal of that name in existence.]

HISTORY OF A SPIT. — Translated from the French.

[To the Editor of the Medical Times and Gazette.]

SIR,—I find in the last Number of the *Journal des Connaissances Medico-Chirurgicales*, a very amusing history of a case, narrated by Ricord, at a dinner given by the distinguished surgeon Seutin to his *confrères* of Belgium, and who had, a short time previously, entertained him on his return from Russia. The story is told before a hundred and twenty members of the Faculty, and whether true or fabulous, is well calculated to ridicule a useless, absurd system of interrogation pursued by many practitioners towards their patients:—

"M. X—— made a journey, either by railroad or by steam-boat, I do not recollect exactly by which of those two modes of travelling. At all events, this uncertainty is of little importance to the subject with which we have to occupy ourselves, as you shall immediately see. However, it occurred, the boiler exploded, and M. X—— was transfixed by an iron spit, seven feet long. The spit penetrated his belly a little above the navel, and came out at an opposite point through the back in such a manner, that there were three feet before and three feet behind. M. X—— was brought to his house, and his position was considered one which required the aid of science.

"A doctor was called in. He first began feeling the patient's pulse, and, by way of gaining time, he, (the doctor) wished to do two things together, and therefore, at the same moment, asked him where he suffered. 'In my belly, Sir.' 'Ah, very good! how has this happened to you?' The patient then relates, at full length, the circumstances of the explosion. This account finished, the doctor thinks it his duty to follow up his questions: 'Are your family subject to this accident, Sir?' 'No,' answers the patient, 'for all that I know, they are not. Both my father and mother are very old, and have never been spitted: my brother enjoys the best health, and my sister, in like manner, at no period of her life had a spit run through her belly. I can say the same for my uncles and aunts.' 'Very well, Sir, I wanted all that information for the purpose of forming a prognostic.'

"The doctor, in order to prove to his patient that he completely understood the nature of his complaint, still continues, 'You must find it very difficult to lie upon your back?' 'Oh, yes, Sir, I find it quite impossible.' 'You must experience the same amount of difficulty to lie upon your belly?' 'Indeed, Sir, I have exactly the same difficulty with regard to that position.' 'It ought to be much easier for you to lie upon your side?' 'Upon my word, Sir, it is just so; that is the only position that I can take.' 'Very well, Sir, all this information is sufficient for me; it now only remains to decide upon the mode of treatment. In this case, the indications are very precise indeed. We have to select between these two things,—we can either leave the spit in *statu quo*, or, if possible, pull it out; make up your mind for one or the other.'"

Dieppe. I am, &c. STEPHEN MORIARTY, M.D.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your remarks appended to my communication of last week, on the subject of Homœopathy, were certainly sufficiently severe, and also, as it seems to me, quite uncalled for. If I was unfortunate in my illustration of the different kinds of truths, so, also, was Sir J. Herschell in the quotation which I gave, and so is Archbishop Whately equally unfortunate, since they both bear me out in my assertion, that the truths of mathematics and metaphysics may be elicited by *à priori* reasoning, and are not, equally with medicine, founded on experience and experiment. I quite agree with you, that "medicine is to be advanced by experiment and observation," and that "there is no reason why we should not find out a better method of treating rheumatism; and consequently, you cannot, prior to, and independent of experiment, affirm, that this "better method" is not to be found in Homœopathy. As to my ignorance of the foundation of therapeutics, I believe it to be founded on carefully-conducted experiments and observations; and that, being thus founded, Homœopathy has a stronger claim upon our attention than those unknown nostrums which find their way into the wards of our hospitals. Lastly, as to my signature, I need hardly say, that I am fully aware of its derivation, and I employed it simply because I am what is called an Allopath. Why you should find fault with it, I do not know. Requesting the favour of the insertion of these few lines (to which, I think, I am entitled, by way of self-defence),

London. I am, &c. ALLOPATH.

[The question has been settled by experience and observation. The so-called facts of the Homœopaths have been shown over and over again to be no facts. They have been convicted of statistical falsehoods, *usque ad nauseam*.]

[To the Editor of the Medical Times and Gazette.]

SIR,—In your last Number you stated it to be probable that the Hall would make some regulations for the better convenience of middle-aged gentlemen who may be desirous to pass the examination. It would have been well had the authorities thought of the propriety of this before; but "better late than never." Now the College of Physicians are willing, upon the receipt of a certain fee, to give their licence to M.D.'s who are graduates of any British University. Why, then, is it not sufficient for the same graduates to pay, in like manner, a sum of money to the Apothecaries' Company, in order to possess (if they wish it) the privilege simply of administering their own remedies to their own patients? Surely there can be no doubt about the practical capability of these gentlemen.

I am, &c. A GRADUATE OF A BRITISH UNIVERSITY.

Dr. Barclay, of Leicester.—Thanks; the matter shall receive attention.

A Young Surgeon has only to apply to an instrument maker.

WE shall be glad of Mr. Woolcot's occasional Hospital Reports.

Dr. Barker, of Bedford, will observe, that his letter was anticipated.

A St. George's Student.—The discussion is not worth continuing.

If *Juvenis* will address the Secretary of the Society he will receive the information he requires.

Errotum.—In the Report of the Royal Medical and Chirurgical Society, in Dr. Th. Thompson's speech, p. 505, 2nd col., 22nd line from top, for "showed themselves a week afterwards," read "showed themselves ten weeks afterwards."

COMMUNICATIONS have been received from—

Dr. BORCHELL, of the Kingsland-road; Dr. BARCLAY, of Leicester; INQUISITOR; A YOUNG SURGEON; A COUNTY SUPERINTENDENT; Dr. HOLDSWORTH, of Wakefield; Mr. MILTON, of Jewin-street; A CONSTANT READER; ALLOPATH; Dr. SNOW, of Sackville-street; Dr. MORIARTY, of Dieppe; AN EX-SUPERINTENDENT; Dr. BARCLAY, of St. George's Hospital, and May fair; Mr. LANGSTON PARKER, of Birmingham; Mr. WHARTON JONES, of University College, and George-street, Hanover-square; Dr. WILLIAMS, of Swansea; STAFF SURGEON DARTNELL, of Fort Pitt, Chatham; Dr. CRAWFORD, of Montreal; A GRADUATE OF A BRITISH UNIVERSITY; Mr. ROBERTS, of Rye; Professor QUAIN, of University College, and Cavendish-square; Dr. CARR, of Rusholme; Dr. T. K. CHAMBERS, of St. Mary's Hospital, and Hill-street; A ST. GEORGE'S STUDENT; Mr. WOOLCOT, of the Kent Ophthalmic Hospital, Maidstone; Dr. BARKER, of Bedford; Dr. WRIGHT, of Birmingham; Mr. ROBERTSON, of Birmingham; SECRETARIES OF THE EPIDEMIOLOGICAL SOCIETY; Mr. W. SELF, of the Commercial-road; Mr. BOTTOMLEY, of Croydon.

ORIGINAL LECTURES.

LECTURES ON CLINICAL MEDICINE,

DELIVERED AT

The Liverpool Royal Infirmary.

By JAMES TURNBULL, M.D.,

Physician to the Infirmary, and Lecturer on Clinical Medicine to the Medical School.

Case of Aneurism of Abdominal Aorta, in a Patient formerly cured of Popliteal Aneurism by Pressure.—Remarks on Diagnosis.—Treatment.—Case of Tumour in Epigastrium, with Pulsation.—Case of Cancer of Kidney, Lungs, etc.—Post-mortem Examination.—Remarks on Microscopical Appearances.

Gentlemen,—I have observed, that clinical lectures are not intended to supersede the necessity that each of you should examine the cases for yourself; and the two first to which I shall to-day direct your attention, will give you a practical illustration of this observation; they are cases of pulsating tumour in the epigastrium. Both are situated to the left of the median line, about midway between the umbilicus and the cartilages of the false ribs; but, though pulsation can be distinctly felt in both, by the patients as well as by us, we have every reason to believe, that, in the one case, the pulsation is simply communicated from the aorta over which the tumour is seated, while, in the other, it is aneurismal. That, in this case, it is aneurismal, we have strong reason for believing, from the fact of the patient having been formerly cured of popliteal aneurism by pressure over the femoral artery.

ANEURISM OF ABDOMINAL AORTA.

J. R., aged 45, a sailor, native of Jersey, was admitted on the 26th December, with a pulsating tumour in the epigastrium, from which he was suffering great pain. He was rather thin, of sallow, dark complexion. He informed us, that nearly three years ago he perceived a tumour in the popliteal region, which continued to increase during three months, till it was as large as his fist. He then went into Kingston Hospital, Jamaica, where compression was made upon the femoral artery for a week. The pulsation was then gone, and the swelling greatly reduced; and in three days after he was able to take a little exercise. He left the hospital, after having been six weeks in it; and when admitted here, there was scarcely any trace of the tumour remaining, and the artery seemed to be obliterated, as no pulsation could be felt. Four months before he applied for admission here, he began to feel a beating in the epigastrium, and during two months he experienced pain, which gradually became very severe, and was greatly increased by any flatulent distension of the bowels. The impulse is strong and expansive, and gives the sensation of proceeding from a tumour about two inches in length, by one and a-half in width. It is increased by any mental excitement, and is accompanied with a single murmur, which is readily perceived with the stethoscope, but is not remarkably loud or harsh.

The fact of this patient having had aneurism of the popliteal artery would give us a strong reason for presuming, that a pulsating tumour in the course of any other large artery should be of the same nature, for we know that, though aneurisms are often produced by a strain or other injury of the artery, such accidents rarely produce the disease where the artery had been previously sound. The unsound state constituting the predisposition arises from an alteration of the nutrition of the arterial coats, of the nature of fatty, atheromatous, or calcareous degeneration, which impairs their elasticity, and renders the internal and middle coats more easily ruptured. Hence it arises, that several aneurisms are sometimes formed in the same individual, and that, in this case, though one has already been removed by a method of treatment which constitutes one of the greatest triumphs which scientific surgery has gained over the mere use of the knife, and for which we are indebted to the Dublin medical men, we have here a return of the disease in another and more dangerous situation from the original predisposing cause.

In the character of the tumour itself, we have further reason for believing it to be aneurismal. The pulsating part gives the sensation of expansion, and there is no difficulty in ascertaining that the pulsation arises, not from any tumour resting upon the artery, as in the other case to which I shall presently direct your attention, but from the artery itself. By careful examination, we can trace the artery below the enlargement, and there find it of natural size. A single murmur, corresponding with the pulse, can also be distinctly heard, and is confined to the situation of the tumour. In cases of aneurism, a single murmur, corresponding with the contraction of the heart and the dilatation of the vessel and tumour, can generally be heard, and is a valuable aid in the diagnosis of this disease, and in some cases, more particularly of thoracic aneurism, a second and feebler murmur, corresponding to the time of the second sound of the heart, is occasionally heard. The loudness and harshness of the first is chiefly dependent upon the amount of obstruction the current of blood meets with in the seat of disease. The second murmur occurs in those cases of false aneurism, where the sac acts as a reservoir, from which the blood is forced back again into the vessel, producing a feeble murmur in its return through the opening between the vessel and the sac. In some cases, where the aneurisms have become very large, and the coats have been very thick from abundant deposit of fibrinous layers, I have been unable to distinguish any murmur at all, but simply a sensation of shock communicated to the ear.

Again I would remark, that the existence of a murmur in the course of a large artery should not, even when the patient complains much of beating in the part, lead you to believe in the existence of an aneurism, unless you find it combined with the presence of such an expanding tumour of the artery as we find in this case. For you will occasionally meet with thin, nervous, or anæmic individuals in whom very violent pulsation at the epigastrium is complained of, and is much aggravated by any mental emotion, or by the attention being directed to the part, without there being any disease in the vessel itself. Such pulsation is produced by dyspepsia or anæmia, and requires the same tonic and antispasmodic treatment as nervous palpitation of the heart. In these cases you will find that the pressure of the stethoscope upon the vessel often causes a murmur as distinct as that of aneurism. You distinguish such cases from aneurism, however, by the absence of any distinct tumour; by the pulsation being traceable along a considerable portion of the vessel; by the peculiar whiffing murmur being heard in other arteries, especially those of the neck. In many of these cases, too, from the blood being thin and deficient in red globules, you will find that there is a continuous humming murmur in the veins of the neck, such as I have pointed out to you in cases of chlorosis. In the case before us, the patient is of very nervous temperament, so much so that any excitement, or his attention being directed to the part, increases the pulsation. This is much against him, and tends to hasten the advance of the disease; and, if the other signs of aneurism had not been well marked, it might have introduced some difficulty into the diagnosis of the case; but the expanding character of the pulsation, the severe pain in the tumour, as well as in the back, and the previous existence of popliteal aneurism, leave no doubt as to its nature.

The prognosis, in cases of internal aneurism, is extremely unfavourable; but we have reason to believe that there have been instances of recovery from sacculated aneurism of the aorta, in consequence of the blood coagulating and forming firm fibrinous layers in the sac, which has thus become completely obliterated and transformed into a firm fleshy projection attached to the vessel. In treating the disease, we must endeavour to promote this natural method of cure: and, though our hope of success will necessarily be very limited, we know that the means which promote this object are those best calculated to retard the progress of the disease, and to prolong the life of the patient. The formation of fibrinous coagula in the sac, and its contraction, are promoted by all those means which diminish the heart's action and the rapidity of the circulation, and thus favour the stagnation of the blood in the aneurismal sac. Bleeding, low, dry diet, rest, and sedative and astringent remedies, such as digitalis, aconite, acetate of lead, and gallic acid, are the chief means which have been used for this purpose. The deep position of the aorta, and the interposition of important vital organs, will, I fear, prevent us from ever being able to apply pressure in such a manner as to command the circulation in aneurisms of any part of this vessel; but the success which has attended this method of treating those of other parts should stimulate us to make more dili-

gent and persevering use of the other means which lessen the force of the circulation.

This patient being a man of very spare habit and highly nervous temperament, I have not thought it advisable to push depletion and low diet to an extreme degree, lest reaction might be induced. The beneficial effects of moderate depletion, rest, and restricted regimen, have, however, been so marked, that we are encouraged to persevere in this plan of treatment. He had first a few leeches applied to the tumour, which relieved the pain considerably. He took thrice a day a pill containing two grains of acetate of lead, one grain of digitalis, and two of extract of hyoscyamus. Compound decoction of aloes was used occasionally to obviate the constipation produced by the pills; but great inconvenience resulting from this, the pills were laid aside, and on the 4th of January about six ounces of blood were taken from the arm. From this he experienced the greatest relief, the pulsation and pain were very much lessened, and the murmur became comparatively faint. On the 12th he had pain extending towards the groin, and leeches were again applied. After this, he took an eighth of a grain of the extract of aconite in pill with digitalis and hyoscyamus thrice a day, by which the pulsation and pain were decidedly relieved. On the 22nd of February he was again bled to the extent of six ounces, and the blood was buffed. Though very much weakened, the patient was fully reconciled to this treatment by the decided diminution it produced in the pulsation and pain; and we shall still endeavour to carry out the indications of treatment I have laid down, controlling as much as possible the force of the circulation, and diminishing the quantity of fluid in the vessels, whilst we seek to avoid, on the other hand, reaction, and such impoverishing of the blood as would reduce its tendency to coagulate in the sac.(a)

TUMOUR IN EPIGASTRIUM WITH PULSATION.

A. C., a tall, pale, emaciated woman, aged 49, was admitted on the 8th of January. The catamenia are still regular, and she is mother of four children, the youngest of which, if alive, would be two years of age. About two years ago, she felt a small swelling in the epigastrium, which has gradually increased, and she thinks that a blow during her last pregnancy may have caused it. The tumour is not felt in the situation of the pylorus, but to the left of the median line, and it extends upwards, slightly below the cartilages of the false ribs. It is hard, flattened in shape, and has a nodular projection about the centre. The patient has severe burning pain in it, which extends towards the back, but there is no tenderness when it is examined. She complains of a beating in it, and the pulsation can be readily felt on applying the hand. It is not, however, the strong expanding pulsation which we have in the last case; and from this circumstance, as well as from the hard flattened shape of the tumour, we can have no doubt that it is simply communicated to the tumour from the aorta, over which it is situated. The patient has occasionally had sickness and vomiting, and the appetite is bad. The tongue is pale and clean, and smoother than natural. She had been confined to bed for five weeks, and had not slept for several nights before admission, from the severity of the pain. A draught containing half a grain of the acetate of morphia has been given every night, and from this she has had sleep, and has experienced the greatest relief.

In inquiring into the nature of the disease, and the organ affected, we must remember, that the stomach, the spleen, and the pancreas, are those which occupy the situation of this tumour, and one of these is, therefore, most probably the seat of the disease. The stomach is far more frequently affected with malignant disease than either of these organs; but, as the tumour is in the left side of the epigastrium, and there has been very little vomiting or gastric disturbance, I have thought it not improbable, from its position, that the spleen might be affected. As to the nature of the disease, there can be no doubt, from the pain and hardness of the tumour, from the age of the patient, and from her weakness and emaciation, that it is of malignant scirrhous nature. Our treatment will therefore be entirely palliative.

ENCEPHALOID CANCER OF KIDNEY, LUNGS, ETC.

I have now to show you the morbid appearances in a rare and curious form of disease—soft cancer, primarily affecting the left kidney, and also the lungs and some other organs. I am sorry I can give you but an imperfect history of the case, as the patient was admitted in the last stage of the disease, suffering extremely from dyspnœa and pain, and could, therefore, give scarcely any account of himself. I had also no opportunity of learning his previous history from his friends.

He was 52 years of age, of intemperate habits; and he stated that he had been ill with jaundice for six weeks; but he had merely the pale, yellowish, straw-coloured tinge of complexion, so common in cases of cancerous disease. He suffered great general distress, and had dyspnœa, cough, and pain in the left side of the chest. On examining the chest, the sound on percussion of the left side posteriorly was found to be generally duller than on the right; respiration was feeble, and mixed with rather large mucous rhonchi. A blister was applied, but the dulness increased so rapidly, while respiration became more feeble and distant, that no doubt could be entertained, that effusion into the pleura had taken place. This was the immediate cause of death; for, on opening the chest, it was found, that numerous white nodules of soft, brain-like cancer, developed in the tissue of the lung, had extended to the pleura, projecting from the surface of the lung, and had caused pleurisy and effusion of a large quantity of serum mixed with lymph. You observe, that, throughout the substance of the lung, there are numerous soft, white nodules, varying from the size of a pea to that of a walnut; and some of those which have reached the surface show a tendency to the cup-like central depression which is often so characteristic of this form of cancer when it attacks the liver. Towards the centre of the lung, there is a large mass of disease, apparently formed by these nodules coalescing; and on cutting into the centre of this, a dark-red appearance is seen. Effusion of blood seems to have taken place into this part, and it illustrates the tendency to hæmorrage in this form of cancer, from which it has been often called, "fungus hæmatodes." The right lung had a few nodules of the same soft, white character, and a few of the bronchial glands were also affected with the disease. The left kidney forms a tumour as large as an ostrich-egg, and is more globular in shape than natural. When cut into, it was found, that the whole of the cortical substance had been destroyed by soft, dirty-white cancerous matter being infiltrated into it at the upper part of the convex border. The tubular portions were not, however, destroyed to any great extent. The disease was much softer than in the lung, and readily broke down into a semi-fluid pulp; from which, as well as from its being deposited in the infiltrated form, it would seem that the kidney had been the primary seat of disease. The left kidney was sound, and also the mesenteric glands, the pancreas, and the spleen; but in the liver, a few small spots of commencing disease were discovered on the surface of the organ.

The cancerous nature of the disease in this case is sufficiently marked to require no assistance beyond simple inspection, to determine its nature; but you have here an opportunity of seeing under the microscope the nucleated cells which have been considered characteristic of cancer. There are three forms of this disease, in all of which such cells are infiltrated among the meshes of a fibrous stroma, and from any of the forms of cancerous growth a viscid fluid, containing the cells, with numerous granules and molecules, may be pressed out. Dr. Bennett considers that the fibres, the cells, and the viscous fluid, constitute the three essential elements of a cancerous growth, the relative amount of these determining its peculiar form, so that, if the fibrous element be in excess, it constitutes schirrus, or hard cancer; if the cells be numerous, encephaloma, or the soft cancer before us; and, if the fluid abound, and be collected in loculi or little cysts, it is the colloid cancer. The appearance of the cells in the diseased structures taken from the lungs and the kidney, are very similar. Some are oval or rounded, others caudate or spindle-shaped, or split into a triangular form.

(a) He was bled a third time on the 3rd of April with benefit, but towards the end of the month the size of the tumour and pulsation were again rapidly increasing. From the 24th of April, therefore, to this date (10th of May) he has been upon very low diet—three ounces of porridge for breakfast, two ounces of broth and two of bread for dinner, and two ounces of porridge for supper. He has been strictly charged to abstain from any other fluid, and has taken half a grain of morphia every night. Under this treatment, very decided improvement has taken place, he is free from all pain, the pulse is 70, small, the size of the tumour is very materially reduced, and the pulsation greatly lessened in force. We are, therefore, encouraged to persevere. The *Dublin Medical Press* (February 11, 1852) contains a valuable paper, by Dr. O. B. Bellingham, "On the Curative Treatment of Aneurism of the Aorta," in which the use of very low, dry diet is particularly enforced.

They contain from one to three nuclei, each of which has one or two nucleoli; and within the cell there are also numerous granules and molecules. The cells appear to be undergoing rapid development, and to be multiplying by endogenous growth, each nucleus expanding into a fresh cell. Compound granular corpuscles, with numerous granules and molecules, are also visible in the fluid around the cells. In such a well-marked case as this, the diagnosis is sufficiently easy and certain without microscopic aid; but it may be asked if there be any microscopic appearances characteristic of cancer. I believe that cells having the appearances of rapid growth, such as I have now described, are the most characteristic appearances. Dr. Bennett appears to think, that no single element is diagnostic. He observes, however, "when, on the other hand, corpuscles such as I have previously described under the name of 'cancer cells,' are infiltrated among the meshes of a fibrous structure, in the same manner that pus cells are so infiltrated in a pneumonic lung; when such infiltration is not directly connected with a mucous or epidermic surface, and nowhere surrounded by a hyaline or fibro-hyaline substance, then we may conclude, with tolerable certainty, that the structure is cancerous." It would therefore seem, that as yet we cannot do more than regard the microscope as a rather imperfect aid to the diagnosis of the more doubtful cases of cancer, as there is still a numerous class, which even this practised observer has not been able to consider as either decidedly cancerous, or to separate them entirely from such diseases, and to which he has therefore given the provisional name of "cancroid."

LECTURE IN CLINICAL SURGERY,

AT

Guy's Hospital.

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(Continued from page 511.)

HYDROCELE.

The next variety of hydrocele of which I shall treat is that termed congenital hydrocele. Some time ago I had a well-marked case of this kind. A gentleman came to me with swelling of the scrotum, exactly resembling in every respect common hydrocele, being smooth, quite transparent and fluctuating. Presenting the signs of hydrocele so unequivocally, I recommended the patient to have the tumour immediately tapped; he consented, and I was about to perform the operation, when, upon seizing the scrotum, to render it sufficiently tense to be easily pierced by the trocar, the fluid seemed to escape from under my hand. Upon increasing and maintaining the pressure, the fluid passed out of the scrotum into the abdomen, and I immediately perceived that this was a congenital hydrocele. Instead, therefore, of merely tapping it, as I had intended at first, I drew off the fluid, and then applied a truss, and, in a short time, the patient was quite cured. The rationale of this treatment I shall explain presently. A congenital hernia can only exist in consequence of a peculiar abnormal state of the parts involved in the complaint; in common hydrocele the collection of fluid takes place within that sac which descends with the testicle as a process of the peritonæum, and is afterwards cut off from connexion with the abdomen, by the obliteration of the narrow canal, which at first forms a communication between it and the cavity of the peritonæum; in congenital hydrocele the communication between the abdomen and the tunica vaginalis remains open; and, although it is generally very narrow, not, perhaps, larger than a straw, it is still sufficient to afford a passage for the fluid from the abdomen into the tunica vaginalis. This congenital state of the parts does not imply that hydrocele must be necessarily present; it is not improbable, that such a malformation exists in numerous cases in which fluid never collects in the tunic, and in which, consequently, the communication between it and the peritonæum remains undiscovered. It is clear, however, that such a state of the parts must always render an individual liable to fluid collecting in the tunica vaginalis; and this liability is the greater, inasmuch as it may not only form, in consequence of the tunic itself becoming capable of pouring out an excess of serum, as in common hydrocele; but when there exists a tendency to ascites, the fluid may descend from the abdomen and simply, by virtue of its gravity, occupy the tunica vaginalis, which is the lowest part of the cavity in the peculiar condition I have described; under such circumstances a congenital hydrocele is at once established. In these cases we have no means of knowing whether the fluid is secreted by the tunica vaginalis, or whether it descend from the abdomen, unless we may, to a certain extent, judge the latter to be the case, when we perceive in the patient indications of ascites; it would then, perhaps, be fair to judge, that the fluid had been secreted within the abdomen; this is not, however, a point of much importance with reference to the hydrocele; it may affect the general constitutional treatment, but could make no difference as to that of the hydrocele itself; it very often happens, that after obliteration of the communication between the abdomen and the tunica vaginalis, the fluid becomes absorbed spontaneously, it may be inferred, I think, in such cases, that the fluid had not been originally secreted by the tunic, but had merely descended from the abdomen.

The tumour in congenital hydrocele resembles, in most respects, that in common hydrocele. It is pyramidal in form, smooth and fluctuating, possesses the transparency of ordinary hydrocele, and is about similar to it in size and weight. There is, however, one very important difference: if the pressure of the hand on the tumour be continued, the fluid will be forced upwards into the abdomen, escaping from the tunica vaginalis, through the narrow canal by which the tunic communicates with the cavity of the abdomen, as I have already described. The fluid being thus expressed from the tunica vaginalis, the hydrocele will necessarily become flaccid, losing both its previous form and size. It is said, that, in congenital hydrocele, the size of the tumour is greater at the end of the day than when the patient first rises in the morning.

This kind of hydrocele differs from common hydrocele in another respect. Owing to its being continuous with the cavity of the abdomen, it receives an impulse when the patient coughs, while, in common hydrocele, as the tumour is quite isolated from the abdomen, coughing produces little or no effect in it. The diagnosis of congenital hydrocele is made easy under ordinary circumstances, by the facility with which the fluid may be forced out of the swelling by pressure, and by the tumour not terminating so definitely as a common hydrocele at its upper portion. It may, however, be mistaken for hernia, in which, in like manner, the contents may be pressed out of the tumour by handling, and which receives an impulse from the parietes of the abdomen when the patient coughs. It must be obvious, that the treatment in congenital hydrocele must be very different to that in the common hydrocele. The best mode of treatment is first to draw off the fluid, then to apply pressure upon the external abdominal ring to cause adhesion between the walls of the canal through which the tunica vaginalis communicates with the abdomen. If this can be effected, the congenital is at once brought into the state of ordinary hydrocele, and may be subjected to exactly the same treatment. Constitutional as well as mechanical treatment must be adopted, with the object of correcting the tendency to the formation of a fresh collection of fluid after the first quantity is drawn off. The pressure upon the ring is best made by a truss; but it is clear, that any contrivance which permits of the application of continuous pressure would answer equally well with a truss. Under any circumstances, I cannot think it right to attempt the radical cure of congenital hydrocele by injection; that is to say, so long as it remains in its congenital form. I should never venture to inject such a hydrocele, or to use any other local means for its radical cure; for I think that any treatment which would excite inflammation in the tunic would be attended with great danger, owing to the impossibility of confining the inflammation to the scrotum. Many of the French surgeons take, however, a different view of the subject, and do not hesitate to inject congenital hydrocele, only taking the precaution to press firmly upon the ring during the time the irritating fluid is being thrown into the tunic, to prevent it from passing into the abdomen. After all, this must, I think, be a dangerous experiment; for although, by mechanical pressure, it is perhaps not difficult to keep the fluid itself out of the cavity of the peritonæum, pressure on the ring would prove a very ineffectual means of keeping the inflammation from extending from the tunica vaginalis to the peritonæum, which is, after all, the whole source of the danger. Independently of the danger, there is another argument against injecting a con-

genital hydrocele: it is quite unnecessary to run the risk, for in almost all such cases the connexion between the scrotum and the peritonæum is easily obliterated when pressure is applied after the fluid has been drawn off in the common way. After adhesion has been produced in the canal, the fluid in the tunic is sometimes absorbed spontaneously; this may be promoted by the application of lotions, and in young subjects by acupuncturation in the scrotum. Occasionally, congenital hydrocele may be spontaneously converted into common hydrocele, owing to the irritation excited by the presence of the fluid in the tunic, producing adhesive inflammation at the point where the cavities communicate, when, in consequence, complete obliteration of the point of communication ensues.

Congenital hydrocele is very common in newly-born infants. The only treatment required is to press the fluid back into the abdomen, apply a slight compress upon the external ring, and keep the scrotum constantly wetted with a stimulating lotion. In children, this treatment will seldom fail to produce obliteration of the communication between the scrotum and abdomen, which will be followed by absorption of the fluid in the tunica vaginalis; indeed, this is generally effectual up to the period of puberty.

I have stated before, that the condition of the parts which leads to congenital hydrocele, may exist without any accumulation of fluid taking place; but such a person is always subject to these accumulations, and at whatever period of life they may occur, the disease is still termed congenital.

It is not always easy to diagnose a tumour in the scrotum, as a congenital hydrocele, as it is not uncommon for intestine to protrude into the narrowed neck of the tunica vaginalis, at the internal ring, so as to prevent the fluid from passing back into the abdomen. There is, however, another diagnostic mark in congenital hydrocele, which it is useful to remember,—the testicle is generally placed quite at the lower part of the tumour, which makes it appear as if a smaller tumour were superadded to the chief mass. If the tumour be transparent, the testicle may be seen lying below the collection of fluid.

Congenital hydrocele is very likely to be complicated with congenital hernia, and every precaution must be taken in ascertaining the presence or absence of hernia, before a truss is applied; if intestine be discovered protruding at the internal ring, it must be returned into the cavity of the abdomen, the fluid then evacuated from the tunica vaginalis, and a truss applied, this will tend equally to produce the cure of the hydrocele and the hernia as far as relates to the congenital form, for the hernia cannot return if the communication be obliterated; and should the hydrocele recur, it would only be in the common form, and not congenital.

Hydrocele of the spermatic chord is a variety of hydrocele in which the tumour extends from the scrotum through the external as high up as the internal ring, giving to the swelling a sort of hour-glass form, in consequence of its being constricted by the external ring. This variety of hydrocele is produced by the obliteration of the communication being limited, not extending, as it usually does, from the internal to the external ring. The tumour itself takes its elongated form, owing to the fluid extending into and filling the tunica vaginalis of the chord as well as that of the testicle. In these cases, after the fluid has been drawn off in the usual way, the sac should not be injected until it has been ascertained beyond question, that hernia is not concomitant with the hydrocele; for, as I have explained, a hernia may prevent the fluid from passing up into the abdomen, even if the hydrocele be congenital. Therefore, before the injection is employed, we ought to learn satisfactorily, that the canal between the serous cavities of the scrotum and abdomen is sealed by permanent adhesion.

In 1841, Mr. H., a gentleman from Norfolk, aged 37, consulted me with a swelling of the scrotum, which had every sign of common hydrocele, with the exception that the apex of the pyramidal tumour extended through the external up to the internal ring. The tumour was perfectly transparent, and the testicle was in the usual position. I at first thought it was a congenital hydrocele; but was not able to press the fluid into the abdomen. I therefore tapped the hydrocele, and then examined for the purpose of discovering whether there was any hernial protrusion through the internal ring; finding no protrusion whatever, I recognised the case as a complication of the common hydrocele of the tunica vaginalis testis and chord. I injected it at once with the solution of iodine. The patient was perfectly cured.

Hydrocele of the chord alone is another variety of hydrocele; in this the fluid is contained within the serous sac of the chord, and not in the tunica vaginalis testis.

A short time ago, one of my dressers drew my attention to a patient who had come into the surgery for relief. He had a tumour in the scrotum, between the testicle and external ring; the testicle being in no way implicated with the swelling. The tumour was about the size of a bantam's egg, nearly incompressible; offering, therefore, but very indistinct fluctuation; no transparency could be perceived; it was quite unattached to the skin, which moved freely over it; and I felt assured, that the tumour contained fluid, and, as the man stated that he had received a blow, I had some suspicion of its being chronic abscess. I punctured the tumour, and let out about half an ounce of serum of the usual appearance of hydrocele fluid, straw-coloured and coagulable; it contained no spermatozoa, proving it to be hydrocele of the chord. I enlarged my opening, passed my little finger into the tunic, and felt that the sac was completely closed, both towards the external ring and the tunica vaginalis of the testicle. The sac became obliterated, and the patient got well.

This tumour must necessarily have resulted from a peculiar obstruction of the tunica vaginalis of the chord at different points of its course, isolating the fluid both from the testicle and the inguinal canal.

We find, therefore, that the accumulation of fluid may take place in the scrotum, between the testicle and the external ring, as in the case just read, or in the inguinal canal between the two rings; in either case, the diagnosis is more difficult than in common hydrocele; the form of the tumour is different, being round instead of pyramidal; it is also generally smaller, and its comparative weight is less; the fluctuation is often very indistinct, and the transparency altogether absent, in consequence of the small quantity of fluid in the tumour not producing sufficient attenuation of the involved tunics. Indeed, the physical indications of hydrocele upon which we generally rely, are, in these cases, very indistinct; at the same time, I believe that an experienced surgeon will possess sufficient tact to enable him to form a correct diagnosis, without much difficulty, as to the presence of fluid in the tumour; but it is, I think, almost impossible to ascertain whether the fluid be placed within or without the serous sac. In the latter case, the tumour comes under the denomination of encysted hydrocele,—a form of the disease which, properly speaking, has nothing whatever to do with the pathology of serous cavities, and which will hereafter be described.

When hydrocele of the chord is situated between the external ring and the testicle, it forms a small rounded tumour, perfectly isolated from the parietes of the abdomen, and on that account, upon proper examination, it cannot be mistaken for a hernia. It is tense, and cannot be emptied by pressure; nor does its form alter by change of position; therefore, it cannot be varicocele; and, though the regularity of its surface, added to fluctuation, will lead the surgeon to infer, that it is neither a fibrous nor a fatty tumour, at the same time, it should be known, that the last point is not always to be determined without difficulty.

Mr. G., of Wisbeach, aged 42, consulted me in April last, being the subject of a tumour in the scrotum, of which he gave the following account:—Twenty years before, in jumping on a horse's back, he injured the scrotum, and very soon after perceived a slight swelling, which gradually increased in size, and seemed to him, as he said, like a third testicle. It had latterly become enlarged, and given him pain; it had acquired the size of a pullet's egg. Upon examination, my first impression was, that the tumour was omental hernia; but, upon closer investigation, I found it quite isolated from the cavity of the abdomen. I then suspected it to be encysted hydrocele, or hydrocele of the chord; but the absence of fluctuation and transparency, and a peculiar sensation of general solidity in the tumour, rendered the diagnosis to me so inexplicable, that I sent the patient to Sir Benjamin Brodie, who wrote me word, that he believed it to be either a steatoma or a fibrous tumour, and referred me to his "Lectures on Pathology and Surgery," (p. 271,) where he relates a similar case. The patient now told me, that he had already consulted Mr. Lawrence, who, it seems, had formed a just diagnosis, as he had told the patient that it was a swelling which must be cut out. I therefore recom-

mended him to return to Mr. Lawrence; but, from what I have heard, I believe the operation has never been performed,—consequently, the case remains still involved in mystery. Is it not possible, that this may have been originally a case of hæmatocele, in which the fibrin had become organized, and adherent to the tunica vaginalis,—a possible condition, as proved by a preparation of John Hunter's, in the Museum of the College of Surgeons?

Having ascertained that the enlargement is not caused by any of the diseased conditions mentioned above, we shall perceive, that the presumption must be, that it is hydrocele of the chord, either external or internal to the tunica vaginalis of the chord. Which of these varieties it is, can only be proved by examining the fluid after evacuation. So much difference will be found between the fluid from the two kinds of hydrocele, that the diagnosis may be at once established with ease from this circumstance.

Within the last week, a patient, between 20 and 30 years of age, came into the hospital with a tumour in the scrotum of rather a doubtful character. Sometime before, he had received a blow upon the scrotum, and the tumour began to form soon after the injury; it was placed on the anterior part of the scrotum, between the testicle and the external ring; it was round, very circumscribed, and so tense, as not to give the diagnostic fluctuation. With difficulty and careful examination, it was discovered to be transparent, although not to a great extent. I considered it to be encysted hydrocele. I tapped it, and evacuated yellow serous fluid, like that of ordinary hydrocele; this fluid did not contain spermatozoa, which, with its general character, abundantly proved to my mind, that the disease was hydrocele of the chord. When I speak of encysted hydrocele, my reason for coming to this conclusion will be more apparent.

[To be continued.]

ORIGINAL COMMUNICATIONS.

ON THE TREATMENT OF CROUP BY WARM VAPOUR AND EMETICS.

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Before passing to the more special object of this morning's lecture, which is to lay before you the results we have recently obtained from the employment of warm vapour and emetics in the treatment of croup, it will be well to call your attention to some cardinal points in the morbid anatomy and pathology of the disease. The admission into our wards of six cases of croup, within a comparatively short period, has given us ample opportunities for studying its phenomena, both in the living and the dead body.

You will see, from an inspection of the specimens before you, which were taken from two of our fatal cases, that the morbid anatomy of the primary element of croup is very simple.

In both specimens, a concrete, dirty-white exudation lines the windpipe from the epiglottis downwards, covering the cordæ-vocales, blocking up the sacculus laryngis, and forming a tough, continuous, tubular membrane. In passing down the windpipe, it becomes gradually less and less tenacious, until it at length passes into mere mucus, a little above the bifurcation of the air-tube. It is important to observe that, in the same direction, the false membrane becomes less and less adherent to the surface on which it lies. In the lower part of the trachea, in these specimens, it floats loose and detached, while, in the larynx, it adheres so closely that it cannot be stripped off entire. So that, by a sad fatality, the morbid product is the harder to dislodge, the narrower the channel it serves to obstruct. This is, I believe, always so; and the fact is one, I need scarcely say, of very great importance in many ways.

Pursuing your examination, you will trace the same false membrane extending by direct continuity over the fauces and velum, and passing thence into the posterior nares. These are its limits in the specimens before you. But cases occur, not unfrequently, in which it extends, by direct continuity also, on the one hand down the gullet to the cardiac orifice of the stomach, and, on the other, into the minutest ramifications of the air-tubes. In an opposite extreme it is sometimes limited to the larynx, itself, covering scarcely more than a square inch of membrane.

Although identical in nature, the morbid product is apt to vary in extent, therefore, in different cases. Dr. West has remarked, that "the false membrane is much oftener found in the larynx than in the trachea, and that it is in both much more frequent than in the bronchi." My own experience entirely coincides with his. The membrane would appear to be first formed in the fauces and larynx, and only to be developed on the remainder of this wide mucous tract by extension of the morbid process. It is a singular circumstance, and one which could not fail to be of great interest, could we see its true significance, that, when the disease penetrates to the lung, it often affects the tubes of the right lung exclusively, the false membrane passing down the right bronchus, and leaving the left untouched.

The histological and other characters of the exudation itself are very important. If you examine a portion of the false membrane under the microscope, you will see that it is essentially made up of cells or corpuscles lying in a granular blastema. These cells bear, as you will remark, a very close resemblance to the common pus-corpuscle. Pus-corpuscles are, in fact, as I have endeavoured to show you at greater length elsewhere, none other than these same cells, dead,—most probably in a higher state of oxidation, and otherwise chemically altered. Here and there, however, a stray cell is seen, marking by its fusiform shape a tendency to rudimentary but abortive development.

The most important character of the blastema in which the corpuscles are imbedded, is the large number of fat-granules it contains. The presence of this large quantity of fat in the morbid product, besides presenting another point in common with pus, is probably connected in some way with its low capacity for organisation.

These characteristics are constant in the false membrane of croup. They are also occasionally met with in inflammatory exudations from other surfaces; especially in such as occur under direct exposure to air, or as the effect of malignant poisons,—or, in weak and cachectic persons, whatever the cause of the inflammation. Such exudations have, in fact, received the epithet *croupal*, in testimony of this likeness to the croupal type.

As a group, they are especially characterised by a proneness to degenerate into pus, and other kindred fluid products, with a tendency to the development of corrosive, and, in some cases, of still more noxious qualities.

This close affinity of the exudation to pus is, in croup, a character of great moment; since, in virtue of it, a product which was, at first, solid and adherent, and firmly choking up the air-channel, may, by a slight change of conditions, give place to a fluid secretion, offering no serious mechanical obstacle to the ingress of air, or to its own expulsion. In cases of recovery, some such secretion always supersedes the croupal, and is, in fact, the chief instrument of that separation from the surface beneath which prepares the way for its ejection.

The condition of the mucous membrane itself varies much in different cases, and in different stages of the disease. As a general rule, it presents less vascular redness than is seen in other forms of inflammation of the same degree. Of this, two different explanations have been offered. One, that the gorged capillaries are relieved from their distension by the outpouring of the effused lymph; the other, that they are choked up with white products of the same nature as the exudation itself. Which of these explanations is the true one, or whether either adequately represents the fact, I will not pretend to decide.

Besides being inflamed, the larynx and under surface of the epiglottis are generally found fretted and ulcerated, and a similar but still more extensive destruction of substance often affects the tonsils also. These alterations are, in great part, the result of the corrosive action of the morbid product. The material of the false membrane is no sooner poured out than it becomes the seat of catalytic changes, which being communicated to the living membrane, (whose power of resistance is lowered by disease, and whose elements are already prone to dissolution,) lead to its disintegration. Direct exposure to air, the presence of sufficient moisture, and the heat of the underlying, diseased surface, all concur to give activity to these chemical changes in the morbid product.

So much, then, for the local changes in croup. If you consider their very definite character, as well as their limit-

ation to a particular tract, you will see at once that we have to deal with a disease of a very special nature. The almost exclusive occurrence of this form of croup in very early life, and, still more, its occasional epidemic prevalence, are facts which admit no other view.

Bearing this in mind, you will not, therefore, take every case of catarrh which may happen to be attended with croupal hoarseness, to be a case of genuine croup, and still less will you confound with the disease before you, that equally specific form of inflammation of the same surface which frequently occurs in the adult, under the name of croup, and which is, in fact, nothing more than erysipelas affecting a mucous membrane.

I draw your attention to these distinctions, not only because they are important to prognosis, but because a knowledge of them is essential to the appreciation of the effects of treatment in any given case.

After this account of its morbid anatomy, it is almost superfluous to add, that this disease of the windpipe is one which derives almost all its importance from situation. As a disease of a mucous membrane, it is often trivial enough; but, as mechanically hindering the ingress of that wonderful agent which quickens the flesh with living powers, croup extinguishes life in its very source.

The mode in which death is brought about, is painfully interesting to watch. In the language of technical writers, it occurs by asphyxia.

Dr. Watson has well shown, in his admirable Lectures on the Practice of Physic, how peculiarly inappropriate is this term as a physiological representation of the event. The word "apnœa," which this eminent physician has proposed to substitute for it, is a far more correct expression. I would, however, venture to suggest, "*death by privation of oxygen*," as better still. Better, not only as more strictly expressing the real fact of the matter, but as bringing before the mind relations which, since they play the fundamental part in the train of morbid phenomena, it cannot be unimportant to keep distinctly in view.

The word "apnœa," (meaning want of breath,) does, indeed, give, in a single word, a vivid and faithful picture of the real manner of the death. But, in concentrating the attention on the difficulty of breathing, as expressed in the vague character of an undefined natural want, however primary, it has the disadvantage of diverting the mind from the deeper relations which this want at once conceals and implies.

Absorbed, indeed, as we are in contemplating the agonies of the slowly-suffocating man, we are already too apt to forget, that this sore distress—these livid and ghastly looks—this conflict—this gasping for life—this despair—this restless agony, only ending in death—that these phenomena, at once so subtle and various, are all the effect of the privation of a common chemical agent.

The fact is one which you would do well to weigh in all its bearings.

Were there no other evidence to the same effect, we might learn from what we witness here, how profound, how manifold, how fundamental a part is played by chemical change in the phenomena of life, in disease, as in health.

What this fundamental relation of oxygen to the living forces implies as to their own nature—their relation to other forces better known to us, or their own several identity (as to ultimate essence) among themselves, we must not now inquire. (a)

It is sufficient, for our present object, to bear in mind the very elementary truth, that the gaseous fluid which finds its only (adequate) entrance into the living economy through the tube which is here all but closed against it, is essential to the development of the powers of life, and absolutely necessary to their maintenance from one moment to another. And that, not vaguely be it remembered, but under quantitative conditions, as rigorous and precise as those which govern the development of the forces which animate—so to speak—the galvanic pile and the steam-engine.

(a) In the wide field that lies between the admission of the chemical agent into the blood, and the wonderful nature and variety of the living manifestations which *all* hang upon it, many high problems stand for future investigation. And, although there is much here that must ever remain inscrutable to us—many a mystery, the depths of which we may never fathom—there are many questions, too, which, taking the form of dynamic problems, not only lie strictly within the scope of scientific research; but which it will not do to ignore, if we pretend to any more than the most superficial insight into the functions of life.

At first view, you may, possibly, be inclined to deem such considerations as these foreign to a lecture, of which the special object is to illustrate a point of practice. But the more you dwell upon them, the more I think you will see their eminently practical bearing on all that concerns the physician in the disease before us.

First, as regards the pathology of croup.

In the progressive and all but complete exclusion of oxygen, you have the explanation of that early failure of power and animal heat which we remarked in all our cases, and which is one of the most important characteristics of the disease.

It is a result of this exclusion that fever so soon gives way to collapse, and a hot and burning skin to colliquative sweats. To the same cause may be traced the early-failing pulse, and the rapidly growing weakness.

A clear insight into these relations will show you, at once, how transient in croup is the period for lowering measures, what caution is needed, even in their early use; and how important it is to avoid, in advanced stages of the disease, for emetic or other objects, the employment of depressing agents.

Perhaps no greater error *can* be committed in the treatment of this disease than persevering too long with lowering measures. The whole effort of contending with the impediment which obstructs the breath, falls on the muscular force, and the issue in death or recovery may depend on the strictest care and economy of that feeble remnant of it, which, in obedience to a blind, but irresistible impulse, is still struggling on in the interest of the other powers.

The time during which the struggle for life is maintained in fatal cases, depends much, of course, on the greater or less rapidity with which the air-channel is blocked up, as, also, in some measure, on the degree of muscular power of the patient.

Where the process of occlusion is rapid, a few hours may finish the work.

When the case is more protracted, other changes intervene, which we must not leave unnoticed.

We have hitherto been giving our attention to the influence of this exclusion of air on the forces of life; we have now to notice effects scarcely less remarkable on the distribution of the fluids also.

A knowledge of these is essential to a complete view of the succession of morbid changes, and of the whole mechanism of death.

I have already had many opportunities of showing you, that (in accordance with a law first clearly laid down by Dr. Draper,) the chemical actions to which the blood is subjected in traversing the capillaries, constitute a very important agency in promoting the onward course of this fluid. Whenever, from want of some essential condition, these actions are hindered or suspended, this course is retarded, and congestion ensues.

Concurrent physical changes in the blood giving it a tendency to adhere to the walls of the vessels, have, no doubt, some part in this result: but the suspension of the normal chemical changes constitutes the chief impediment.

Now, if this be true of the circulation generally, it is preeminently true of the circulation of the lung.

Exclude, or limit, the access of oxygen to the blood, and the course of the blood through the capillaries of the lung is at once retarded. Hence, there is never asphyxia without pulmonary congestion.

The amount of this congestion varies much in different cases and in different stages of the disease, and it is not always easy to determine the precise conditions by which it is governed.

As a rule, however, it is greater the slower the process of suffocation, and the greater the vascular fullness of the patient. For these reasons, it is often greater in strong and robust children, who are not only, generally, more plethoric than others, but, with the same amount of laryngeal obstruction, can maintain a longer struggle.

When the local vascular tension has reached a certain height, the more watery part of the blood transudes, the air-tubes become gorged with serous fluids, and, if the congestion be extreme and protracted, and the heart strong, effusion may even take place (as we saw in one of our own cases) into all the serous cavities of the chest. In the particular case referred to in the parenthesis, there was not only fluid in the pleuræ, but even the pericardium contained a considerable quantity. That there may be no ambiguity

about the fact, it may be well to mention, that the child was previously in robust health.

Upon the occurrence of effusion into the air-tubes, there soon ensues more or less extensive collapse of the air-cells beyond, which constitutes another great impediment to the re-admission of air to the lung.

It is scarcely necessary to add, that after these secondary changes have supervened, there is little hope of relief from any measures addressed to the primary disease in the throat. It is in vain to admit air into the windpipe when obstructions lower down bar its access to the vital fluid.

If, in addition to these considerations, you reflect that the false membrane itself sometimes extends into the minutest air-tubes (as we also saw in one of our own cases), and that (in large towns at least), in a certain proportion of the children affected with croup, the lungs are already tuberculous, you will see at once that a given number of deaths must occur, even under the best-devised treatment.

For the same reasons, it is plain enough that in croup, most peculiarly, all remedial measures will be more successful the earlier they are put in force.

As the danger of the case will, *cæteris paribus*, depend much on the degree to which the natural channel for the admission of air is obstructed, it is always a matter of interest to be able to form some estimate of this.

Now, besides what may be gathered from the lividity, the general distress, and other signs, there are two sources of evidence in phenomena the most easy to observe, which, taken together, will always give you a very accurate measure of the degree of obstruction. One is to be found in the modification which occurs in the natural respiratory murmur. Whenever this murmur is extremely feeble, and still more when it is inaudible, we may be pretty sure that the ingress of air is much impeded. But a still more accurate measure of the degree of laryngeal obstruction is to be found in a peculiar modification of the act of breathing, which always occurs in severe cases of croup, but which I do not remember to have seen anywhere noticed.

The first result of the privation of air, however occasioned, is redoubled effort on the part of all the respiratory muscles. The diaphragm descends with great force, and the help of every auxiliary muscle is enlisted in behalf of the distressed organism. The amount of effort is determined by the needs of the economy and the strength of the acting muscles, but the result depends in great part on other conditions. As there is no vacuum possible here, the actual expansion of the chest is measured, not by the respiratory effort, but by the volume of air which can still pass in through the narrowed glottis. So that when, as often happens, the glottis is all but closed, the effect of the utmost effort of the respiratory muscles is not to expand the chest, but merely to alter its form. This is the explanation of that remarkable sinking in of the sternum and sternal cartilages, as indeed of all the lower part of the chest, in the act of inspiration, which occurred in all our fatal cases as the end drew near.

Having detained you so long with considerations on the pathology of croup, we may now pass to the treatment of the disease.

This, it is scarcely necessary to say, embraces two primary and fundamental objects;—the first, to promote the separation and expulsion of such false membrane as may be already formed,—the second, to prevent the formation of new false membrane, by means calculated to moderate or to alter the character of the inflammation to which the morbid product owes its origin.

Now, long before adopting the precise method of treatment applied to the cases I shall presently have to relate, many considerations had led me to suppose, (in common, I doubt not, with many others,) that the most direct as well as most effectual means of securing both objects would probably be found in the suitable modification of the atmosphere breathed by the patient.

On the other hand, it had appeared to me equally clear, on the same grounds, that the great obstacle to the cure of the local disease of the windpipe, is the direct chemical action of the double current of air passing over the inflamed surface.

There is, indeed, much reason to believe, that the effect of air, and specially of the oxygen it contains, in keeping up inflammation, (itself a process of rapid oxidation,) in already diseased parts, as well as in exciting inflammation in parts whose power of resistance to common chemical agency is, through some cause, lowered, is only beginning to be appreciated.

Yet there would seem to be little doubt, not only that this agency of the air is most large and influential, but that a knowledge of it furnishes a principle fertile in applications as well to the cure as to the prevention of disease.

The reality of such an agency as that here assumed, may be made evident in many ways.

In the first place, the consuming and destructive power of the active principle of the air we breathe on living tissue, generally, is universally known. Every day as much of the substance of the living body as is represented by the flesh, and other nitrogenous constituents, we appropriate in the shape of food, is reduced from the living state to that of dead chemical compounds by this consuming agent.

Here the oxygen of the air is, it is true, in solution in the blood, and in dynamic and physiological relation with the tissue with which it unites, but in the gaseous form also, and on the surface of the body,—acting not physiologically now, but pathologically,—its effects under certain conditions are scarcely less marked.

Thus, for instance, to certain forms of serous membrane, especially if to its own power the depressing effect of cold be added, air is most deadly.

Admitted into the pleura, the peritoneum, or arachnoid, (as I once saw in a person in whom the trephine was used for the removal of a piece of scull, which was supposed, through irregularity of form, to be the cause of inveterate epilepsy in the patient,) cold air often excites the most intense inflammation,—a result which there is no reason to doubt is mainly due to the chemical action of the oxygen it contains on the delicate membrane which lines these cavities.

It may, indeed, be objected, that this offers no analogy to the case before us, since the epithelium, which covers the air-tubes, is, not only like that of the surface of the body generally, proof against any injurious action from the air, but is actually destined to protect the underlying tissues from its corroding influence.

This is undeniably true. But, on the other hand, the susceptiblity which this structure does not possess by nature, it may readily, and from various causes, acquire, and to almost as high a degree as that of the serous membranes themselves.

In the state of health it remains unharmed; but let its natural power of resistance be weakened, either along with that of the rest of the body, as in general debility, however occasioned, or through some defect in its own nutrition, and cold air becomes almost as injurious to it as to the peritoneum or pleura.

I have already often had occasion to show you, that the bronchitis of the weak, of the aged, of the emphysematous, is, for the most part, the result of the direct chemical action of the air, on a mucous membrane whose power of resistance is lowered, either by general debility, or by some defect, permanent or transient, in its own nutrition; or, what is more common still, by both. Excluding specific and epidemic influences, the records of bronchitis in the Reports of the Registrar-General, may be read as an illustration, on the broad scale, of this position.

The power of air, under certain conditions, to set up the most intense inflammation of the mucous membrane of the air-tubes was very distinctly shown in a case which fell under my notice some years ago.

It was a case in which it became necessary to perform tracheotomy, to rescue a boy from impending suffocation, produced by rapid swelling in the structures about the larynx, caused by his having accidentally swallowed boiling water. The difficulty of breathing had existed but a short time; there was little or no secondary congestion of the lung; the boy was previously in good health, and the operation was skilfully performed.

Barring the intervention of some new element, therefore, there appeared to be no assignable cause for the particular mischief which followed. But the air which the boy breathed, instead of passing through a long and tortuous channel, and becoming warmed on the way, as in the state of nature, entered now by a short and direct cut into the bronchi. At the same time, the weather was cold; and, as no sufficient precautions were taken to give the air of the apartment a suitable temperature, the result was, the most intense and diffuse bronchitis, which well nigh marred the success of the operation.

That common air may have a very damaging effect on this mucous tract, is, therefore, a fact beyond dispute.

It would be easy to extend much further, if need were, the proof of its operation.

But perhaps, after all, it was scarcely necessary to illustrate at such length a position which you might have found no difficulty in conceding at once.

The fact itself, however otherwise viewed or described, is not only a part of familiar knowledge, but precautions founded on the perception of it are so universal, as to have the force and character of a common instinct.

If, then, the air we breathe have power to set up inflammation on a surface not before diseased, how much more damaging is it likely to be to a surface already inflamed.

The inflamed trachea in croup is sheathed, it is true, from the direct influence of this element by the intervening false membrane.

This is seldom, however, the case throughout the disease. For, besides that in its early stage there is always a time when false membrane is not yet formed, the instances are rare in which even after its formation the larynx is not partially or completely denuded of its adventitious covering, once at least during the course of the complaint. In almost every case, if narrowly watched, it will be found that distinct flakes of false membrane are, at some time or other, coughed up with great temporary relief to the sufferer. So that it is precisely at the moment when the best hopes are excited by the occurrence of this incident, that the prejudicial action of the raw air in keeping alive the inflammation in the now bare and diseased surface steps in to disappoint them.

As the air is more injurious the colder it is, it naturally occurred to me, that the first object in the treatment would be to raise the temperature of the air breathed by the patient to a suitable point. The second was, to saturate the air thus warmed with watery vapour. On many grounds, indeed, it seemed to me not improbable, that—whether by modifying the physical constitution of the false membrane itself—or, perchance, by promoting a more serous secretion beneath it, or in both ways at once—the moisture thus generated might specially aid in the separation and expulsion of the morbid product, and possibly also prevent its being formed anew.

It is for more enlarged experience to say to what degree these important objects are likely to be realised by these simple means.

The results we have as yet obtained are perhaps too few to build upon securely. Nevertheless, as far as they go, they surpass the best expectations that could have been formed of this method of treatment. If they warrant nothing more, they at least encourage to a further trial of it.

The mode of proceeding was, as you remember, simple enough. The sick child was placed in a bed, closed on all sides by a double curtain. Into this bed was introduced a large earthenware pan nearly filled with all but boiling water; and into the water was plunged, from time to time, a heated brick, for the purpose of disengaging steam, care being taken to have the brick completely submerged. By this means, the atmosphere within the curtain was constantly kept at a temperature of from 75° to 80° Fahr., and surcharged with vapour. Where it was practicable, the mother was placed in the bed with the child in order to reconcile it to the strangeness of its situation. As convalescence approached, this was on several occasions found to be a useful precaution.

The only other measure adopted, was to give an emetic from time to time, whenever the struggle for breath seemed more than commonly urgent. Not, however, for the sake of the antiphlogistic effect of the antimony or other agent employed, but to help, by that mechanical succussion which the act of vomiting causes, and which daily experience shows to be so effectual for this end, in the expulsion of the morbid product. This is the great and paramount use of emetics in the treatment of croup, and it is one the more to be valued, *since there is no substitute for it.*

Having entered at such length into the motives which led to the adoption of this plan, it only remains for me to relate, with as much brevity as I can, the results obtained by its employment.

Case 1.—Edwin Poole, a fine robust child, two years and a half old, was brought to the Bristol Royal Infirmary, on the 15th March, 1851. He had been suffering from a severe cold for about a week, but, from the mother's account, it was not until the morning of the 15th, the day of admission, that decidedly croupal symptoms had set in.

On his arrival at the hospital, at about four p.m., his state was already very urgent. The distress of breathing was extreme; the face was livid and bloated, the respiratory murmur scarcely audible. It was plain that the ingress of air into the chest was all but intercepted.

Now and then, in a paroxysm of still greater distress, actual suffocation seemed to be impending. The breathing was loud and stridulous; the cough croupal and characteristic. A layer of white exudation, which visibly coated the velum and fauces, left no doubt as to the nature of the laryngeal obstruction. The pulse 130 in a minute. The only favourable circumstances in the case were, that the heat of the surface still kept up, being in fact rather above than below the natural standard, and that the respiratory muscles still contended vigorously against the impediment which opposed the entrance of air through the windpipe.

As soon as the child was placed in bed, an emetic was administered, two leeches were applied to the top of the sternum, and ten grains of bicarbonate of potash in solution were ordered to be given every half hour.

At five o'clock, as he was growing rapidly worse, two other leeches were applied to the throat; and the fauces, and, as far as it could be reached, the larynx, also, were freely "swabbed" with a saturated solution of nitrate of silver.

These measures were, like the former, followed by no relief, and at half past five, when I saw the child for the first time, he was still growing steadily worse. The breathing had become still more difficult, and the lividity deeper.

As three children, who were admitted in much the same state, and treated by the common methods, had lately died in the house, I determined in the present case to make trial of the plan already described.

The child's bed was accordingly converted into a vapour bath, and he was ordered to have an emetic every four hours. The strength to be supported by good broth, as need might be.

From the moment of beginning to breathe the new atmosphere, the child began to mend. At the end of two hours the change for the better was very striking.

The breathing was much easier and less stridulous, and the lividity of countenance had much diminished. Many hours of tranquil sleep were obtained through the night.

The emetic was administered two or three times, and on each occasion the vomiting was attended by the expulsion of distinct flakes of false membrane.

At one p.m., on the following day, every alarming symptom had disappeared. The breathing had become much more free, and there was not the slightest shade of lividity remaining.

The inspirations were 28, and without labour; the pulse had fallen to 98; the cough had become loose, and had almost entirely lost its croupal character.

In the evening of the same day, he was so well as to be sitting up in bed at play with his toys.

From this time his recovery was rapid and uninterrupted. The vapour was continued for another day, and for two other days the child was kept in close curtains, a precaution which, from the well-known tendency to relapse in croup, it was thought desirable to repeat in all the other cases.

On the 21st the child was discharged cured.

In the next case, the course of the disease was slower, and the distress was at no time so urgent as in that just related.

Case 2.—John Winchester, 22 months old, was admitted to the Bristol Infirmary on the 30th March, 1851, labouring under croup. An attack of measles, which occurred about two months before, had left him weak and cachectic, and he was already on the books as out-patient, for the treatment of cancrum oris affecting the gums of the lower jaw.

A cough, like that of a common cold, which had existed about a fortnight, had, within the last week, gradually put on a croupal character, and, at the same time, the breathing had become more and more difficult.

At the time of admission, the symptoms of croup were fully developed. The cough was characteristic, and the breathing, which was loud and stridulous, was extremely difficult. A distinct false membrane lined the fauces and velum. The complexion was not, however, very livid as yet. The surface hot, and pulse 125. Sibilant and other catarrhal noises were audible over the chest.

The same treatment was adopted as in the former case, and with exactly similar results.

Immediate relief followed the employment of the vapour, and, in the course of six hours, all alarming symptoms had disappeared. Distinct flakes of false membrane were expelled after each emetic, with great relief to the breathing.

On the 1st of April, the breathing was quite free and natural; the cough had become loose, and had entirely lost its croupal character. The symptoms of croup proper had, in fact, disappeared, and only those of catarrh remained. For the treatment of this, and to recruit his general health, he continued in the house until the 17th of April, when he was sent out cured.

Case 3.—Arthur Cross, a fine boy, two years old, was brought to the hospital on the 6th of April, 1851.

In the middle of the night preceding, he was seized suddenly, and without assignable cause, with hoarseness, croupal cough, and extreme difficulty of breathing. On admission, all the symptoms characteristic of croup were fully developed, and the case was considered to be very urgent. The same treatment was employed as in the two former instances. On the morrow, all urgent symptoms had yielded, and the child was convalescent. On the 10th of April he was discharged, well. (May, 1851.)

Since the occurrence of these cases, seven other instances of croup have come to my knowledge, in which the employment of vapour, in the manner already described, formed the principal part of the treatment. Of these seven patients, two only died. In the five others, recovery was rapid, and the employment of vapour was uniformly followed by great and immediate relief.

Of the two fatal cases, one may fairly be put out of the field, as being beyond all hope of remedy when first seen; he died, in fact, within three hours of being brought to the hospital. When admitted, he was already comatose, and a violent attack of convulsions soon followed. On dissection, the false membrane was found to extend down the right bronchus into the minutest air-tubes of the right lung, and nearly the whole of that lung was in the state of collapse, and impervious to air.

The other case did not, at first, appear quite so desperate. The symptoms of croup had, however, existed in great severity three whole days before admission, and, when the child was brought to the hospital, he was already growing drowsy, and the heat of the surface was fast failing. With every act of inspiration, the sternum and sternal cartilages were drawn so deeply in, that it was plain but little air could pass into the chest. Some transient relief seemed to follow the employment of the vapour, but the child died about twelve hours after admission. Two leeches were applied to the top of the sternum, and emetics were not given.

ILLUSTRATIONS OF UNHEALTHY INFLAMMATION.(a)

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Erysipelatous Gastritis and Enteritis; Evidence of their Occasional, and Probability of their Frequent Occurrence.—Dysentery, an eminently unhealthy form of Inflammation, always asthenic in Nature.—A true Blood-poison Disease.—Absurdity of the Prevailing Fashion of regarding it as a Common Inflammation.—Its Peculiarities dependent upon its Specific Essence, not upon the particular Structure and Locality involved, as, in general, assumed.—Profession not Agreed about the True Principles of Treatment; Bleeding, Leeching, Mercury, each and all Unsatisfactory.—Opium our Sheet Anchor.—Author's Experience of the Disease.

ALLIANCES OF ERYSIPELAS.

Assuming that I have made out a case in favour of the independent existence of erysipelatous affections of the respiratory(b) mucous membrane, from the fauces downwards to the terminal branches of the bronchi; and referring the reader to the evidence which has been afforded, incidentally, while analysing the same, of the occasional co-existence of a similar condition of the pharynx and œsophagus,(c) I should be justified, I think, from *priori* reasoning, and upon every principle of analogy, in claiming for the erysipelatous poison a "right of way," at times, through the length and breadth of the gastro-intestinal mucous membrane, also.

But, although the functions of this latter part of the economy may be arrested for a time by the erysipelatous poison, without that danger to life which attends upon its development in the larynx and bronchial tree, and, therefore, without affording us the same opportunities of verifying, by *post-mortem* inquiries, its existence in this situation as in the respiratory organs, we are, nevertheless, not left entirely to surmise, or to analogy, for the evidence of its occurrence, now and then, in the abdominal mucous membrane.(a) To pass over the constant coincidence of vomiting in the general train of symptoms which characterise erysipelas, and its by no means infrequent associate, diarrhœa,—derangements that might, not unfairly, be assumed to take their rise in a like condition of the mucous membrane, we have the evidence afforded us of an inflamed state of this membrane with effusion into the areolar tissue beneath, in very many of the fatal cases of erysipelas in which it is sought for. In the published histories of such cases, we shall often find this incidentally noticed, though, for the most part, its connexion with the external disease is unsuspected, or passed over. When erysipelas prevails epidemically, then it is that we shall find the gastro-intestinal mucous membrane most generally participating in the influence of the poison, and affording evidence, *post-mortem*, of the presence of the latter, during life. Indeed, so decided is its selection very often, at such times, for this division of the tegumentary membrane, that it is not uncommon to meet with instances in which vomiting and diarrhœa, with tympanitis and, perhaps, some tenderness of abdomen, shall constitute the only disorder in a locality literally steeped in the erysipelatous poison. In a recent number of the *Lancet*, a good illustration was afforded of this occasional eccentric behaviour of erysipelas, in a lecture by Mr. Solly, under the heading, "Hospital Erysipelas of Peculiar Type." This gentleman recounted as many as eleven or twelve cases of the disease, in several of which the external surface of the body showed no participation in the disorder, while, after death, "considerable vascular injection of the mucous membrane of the intestines was found at various parts, as well as extensive diffuse peritonitis, with fibrinous deposits, and a considerable quantity of pus." "The type of the disease," observes the writer, "was peculiar. In all the cases, without exception, there were prominent symptoms of gastro-intestinal irritation."(b)

"An inflammatory affection of the mucous membrane of the stomach," of a peculiar kind, is frequently met with in practice in conjunction with a general inflammatory condition of the whole course of the mucous membrane, from the pharynx downwards. I think it sometimes occurs as an idiopathic disease; but I have generally observed it taking place at an advanced period of other diseases,—as simple fever, or any of the inflammatory affections, as pneumonia. There is a peculiar rawness and tenderness of the whole mouth and throat; often with a dry and glazed appearance of the tongue, a deep redness of the pharynx, interspersed with aphthous crusts; and, in some cases, the whole pharynx presents one continued dense crust of an aphthous character. There is generally tenderness on pressure in the epigastric region, with uneasiness in swallowing, along the whole course of the œsophagus, and great uneasiness in the stomach, excited by the mildest articles of food or drink. In some cases this is immediately communicated to the bowels, and the articles speedily pass off by a rapid diarrhœa. In other cases, vomiting takes place; and in others, both vomiting and diarrhœa." "I have seen the affection assume a very alarming character, with a very rapid pulse, and extreme exhaustion."(c)

(a) The present paper is the continuation of a subject already brought under the notice of the Profession by the writer in the pages both of the *Lancet* and *Medical Gazette*, and unavoidably interrupted until the present time. The greater part of these contributions has been collected, and a few copies may still be had at Mr. Renshaw's, Medical Publisher, Strand.

(b) *Medical Gazette*, 1851, and Chapters ix., x., and xi., of the Collected Essays.

(c) Loco Citato.

(a) "A woman was brought into St. Thomas's Hospital with some erysipelas of the head and face,—she died a few hours afterwards; and, on examining the body, the mucous membrane of the colon was found extensively and severely inflamed." "A boy, also, lately died in King's Ward shortly after recovering from an attack of erysipelas of the leg and thigh; and, on examining him, extensive ulceration of the ileum was found."—"Dr. Robert Williams on Morbid Poisons," Vol. I.

(b) *Lancet*, March 15, 1851.

(c) "Abercrombie, on Diseases of Stomach, Intestinal Canal," etc. 3rd Edition. Pp. 49, 50. Was this disease erysipelatous in nature, connected with the circulation of deteriorated blood in the system? "I have generally observed it taking place at an advanced period of other diseases;" *i.e.*, under circumstances remarkably conducive to the development of erysipelas.

The literature of medicine abounds with similar illustrations, if searched for, of such evidence, though the connexion of the abdominal appearances with the causes giving rise to erysipelas on the surface, appears scarcely to have been suspected in the histories which disclose it. Louis and Andral are rich in the materials of this unsuspected alliance."(a)

DYSENTERY.

There is something so peculiar, and so eminently *unhealthy* in the origin, progress, and entire deportment of this disease, in each and all of its forms, that I regard it as alike idle and unmeaning to talk of it as a "*common inflammation*" of the mucous membrane of the large intestine, or of its "solitary glands," as has been more recently assumed by Dr. Parkes to be the seat of the morbid process. Whether we regard the disorder under the comparatively benignant aspect which it assumes in temperate climes; or, on the other hand, in its more uncompromising character in intertropical situations, it observes a remarkable consistency in the leading points of its behaviour. Never occurring, as I believe, in a strictly healthy condition of the blood and animal fluids generally, for the reason that the materials for its generation are not then in existence, it is *asthenic* (b) in all its manifestations. I am aware, that this assertion is at variance with the opinions of some of our best and most recent writers upon the disease. Thus, Copland, in his learned and most elaborate article upon this subject, defines it to consist in "inflammatory action of a sthenic or asthenic kind, seated in the mucous surface of the large intestines," etc.,—and the *sthenic* nature of one form of the disease is very commonly described by writers in general as *absolute*, and the opposite to that which they recognise as the adynamic type of the same. But I am of opinion, that *all this is wrong*, and that no form of the affection is essentially one of *power*,—that it is sthenic only in a relative sense, and when studied in connexion with the more demonstratively malignant examples of the disease.

So little, indeed, has it in common with a healthy form of inflammation, that one deservedly high authority regarded the inflammatory phenomena as not essential to the parent malady, "rather as a sequence than as a cause of dysentery, as a contingent effect, and not as a uniform result." (c)

Dysentery, to myself, has always appeared to be in an eminent degree a *specific* form of disease; and though not prepared to assert its identity with erysipelas, I do not hesitate to express the opinion, that its peculiarities appear to me to be best explained by attributing them to the operation of a cause very closely analogous to that setting up the disease in question.(d) Dr. Parkes has broadly alluded to the occasional connexion of erysipelas with the morbid action giving rise to the colonic ulceration. "If the ulceration," says he, "be attended with erysipelatous inflammation of the intermediate mucous membrane," etc.(e); and, in another place, "heat in the course of the colon occurs in some of the erythematous varieties;"(f) and allusion to the same will be found in other parts of his treatise.

In the records which we possess of some of the epidemic visitations of dysentery, the intestinal disorder has ensued immediately upon an epidemic flux of the bronchial mucous membrane, or has alternated with that affection, as in the case of the epidemic in London in 1762, and in that occurring in the following year in Vienna. Wherefrom, we are entitled, I think, to infer the close relationship subsisting between the exciting cause and the morbid action in both cases,—a concordance of intelligible import in this inquiry, if, as I believe, the bronchitis ensuing upon epidemic states of the atmosphere is erysipelatous or erysipelatoid in nature.

The author of the article "Dysentery" in the "Cyclopædia of Practical Medicine" regards this form of inflammation as in no wise differing from that giving rise to "severe diarrhœa," save that "the inflammation of the lining of the digestive canal is more intense and enduring in the former than in the latter disease."(a) Other writers rather look for an explanation of its peculiarities to the particular locality which it selects for its operations,—a solution of the difficulty which I have always thought as unintelligible as it is unsatisfactory. While an indefatigable and colossal author of our own day, would seem to regard the veil which hangs over its obscurity as almost impenetrable, for he declares, that "our knowledge of the disease, even at the present day, is but little in advance of what existed two centuries ago."(b)

Lastly, the pathology of dysentery, by an accurate observer, who has paid very close attention to the subject, and favoured us with the latest treatise upon it, is thought to be satisfactorily reduced to this,—"that it is owing to the glands of the mucous membrane being particularly implicated in the inflammatory action, that ulceration so rapidly and so readily occurs in the common form of dysentery."(c) The evidence and the reasoning upon which Dr. Parkes has supported his views appear to myself so satisfactory, that I think little more can be desired, as far as relates to the visible pathology of the disease.

But, the visible pathology of a disease is one thing, and the occult influence giving rise to it another; and, while I quite accord to Dr. Parkes the merit of having first traced the disorganising process in dysentery to an implication of the so-called "solitary glands" of the colon, I cannot consent with him to leave the matter there, and to conclude, that "inflammation and ulceration of these glands constitute" and clear up all the difficulties and obscurities surrounding the specialty of this remarkable affection; still less can I subscribe to the decree, that dysentery consists in a common inflammation of these follicles. What is it that determines the morbid process to these same structures so exclusively, and what is the intimate nature and essence of this morbid process? This is the really important question; for, until we shall have been able to form some definite notions hereon, I cannot bring myself to feel that we have nothing more to do than to bleed and starve these inflamed and rebellious glands into a cure, and that, in proportion as we blanch them with these agents, the serious and complicated phenomena which make up this disorder will disappear.(d)

It is not a logical deduction, neither is it in accordance, in my opinion, with daily observation, that the train of evils composing the attack of dysentery in hot and unhealthy countries, or during an epidemic outburst of it in our own, can set themselves up under *diametrically opposite* circumstances,—that is, in a healthy state of the atmosphere, and of the humours of the recipient. In other words, that a disease, the peculiar product of bad air and distempered secretions, shall be manufacturable also (to make a word for the occasion) out of materials in every sense the opposite of these, namely, out of good air and healthy humours; for to such paradox do we commit ourselves, when we recognise the sthenic form of dysentery in any other than a relative point of view, and adduce it as an evidence of "common" inflammation of the solitary glands of the large intestine; and this for the reason, that we know that the most finished forms of the disease are the immediate products of all that is poisonous in atmosphere and secretions, springing up in the bold

(a) It will be said, perhaps, by some, allow that erysipelas may develope itself in the gastro-intestinal mucous membrane, to what end such refinement of diagnosis, beyond the fact of swelling the already ample catalogue of medical curiosities? *Cui bono* the knowledge? I answer, a highly practical end. During the existence of an erysipelatous condition of the atmosphere, should a gastro enteritis prevail, and the symptoms run high, it would be our bounden duty to disconnect such affection from the category of common inflammation of the stomach and bowels, turn our back unhesitatingly upon bleeding, leeching, purging, starving, and the like, and address opium, stimulants, and change of air to the complaint.

(b) "An asthenic or exhausted state of the constitution, and of the digestive canal in particular, insisted upon by Marcus, has certainly no mean influence as a predisposing cause, as shown by the greater prevalence of the disease in persons of this description in all climates and in most epidemics, in soldiers after very fatiguing marches, and in convalescents from fevers and other diseases."—*Copland's Dictionary of Practical Medicine*, Vol. I., p. 713.

(c) Johnson on Tropical Diseases, p. 194. Sixth Edition.

(d) In his article on puerperal fever, Dr. Copland associates dysentery with "irritative and spreading inflammation of the vulva, vagina, and cervix uteri," in puerperal women, as equally occasioned by some of the same sources of contamination in close and foul localities; thus recognizing at least the occasional relationship between dysentery and the spreading or erysipelatous inflammation of puerperal disorders.—*Vide Dictionary of Practical Medicine*, Vol. III., p. 505.

(e) Remarks on the Dysentery and Hepatitis of India, p. 12.

(f) Ibid., p. 53.

(a) Vol. I., p. 655.

(b) Copland, Loc. Cit., Vol. I., p. 701.

(c) Parkes, Loc. Cit., pp. 3, 4.

(d) Dr. Graves says of the dysentery occurring in several parts of Ireland, in 1822, that it was associated with low fever, was characterised by great debility, a rapid and weak pulse, and was very fatal, until wholesome and nutritious food was obtained.—"Transactions of Irish College of Physicians," Vol. IV. Can we conceive the possibility of a form of healthy or common inflammation springing up in the "solitary glands of the colon" out of such materials as these, and requiring to be met by the appropriate remedies for that state of sanguification?

of slave-ships,(a) in over-crowded prisons, hospitals, and so forth, or on the "line of march," where fatigue lends its aid to such combustibles as fetid water, scanty fare, and the like.(b) "We learn from the most certain observations," says Van Swieten, "that whatever is acrid may cause an inflammation, either in the whole body, or in any particular part, by its stimulus. Putrid acrimony, therefore, may bring on an inflammation. How much heat is generated by putrefaction, appears from hay thrown into heaps, which, by putrefaction, will break out into flames."

If an additional argument were needed in proof of the specific or unhealthy nature of dysentery,—and I speak now of the disease in all its forms, and as occurring in temperate climes alike with intertropical,—it is to be found in the disobedience of the disorder under all the usual medicaments in use for common inflammation, as well as in the utter want of harmony among those who have had most opportunities of studying it, as to the most successful treatment of the disease.(c)

During a nearly six years personal intercourse with the disorder, in the Isle of France, where I had opportunities of seeing it in its varied forms, as well in the young and temperate as in those broken down by a long tropical residence and by dissipation, I had reason to be eminently dissatisfied with the routine practice of the day, and especially with that more or less generally in vogue in the adjoining continent of India. I had heard a good deal previously in England, and had read still more about the necessity of meeting the first onset of the disease with venesection, and of combatting the local symptoms with relays of leeches, confiding, absolutely, in the latter, so long as deep seated tenderness could be detected. The first of these I soon had reason to abandon as injurious; and, the second, to set aside as an ally in which no general confidence could be reposed. And, lest it may be urged, that the frequent repetition of leeches is essential to the success of this practice, so long, at least, as tenderness on pressure can be discovered, I wish to be understood as speaking now of their use in that sense more particularly. In my own hands, such practice was abortive as to its control over the deranged action of the part locally; and, I now believe, pernicious in its effects upon the system generally.

But, if the abstraction of blood be not the remedy for dysentery, I can speak with equal confidence, from my own experience, upon a point on which theory might be expected to be no less explicit—I mean the worthlessness of *mercury* for the subdual of the disease. At the time of which I have been speaking, I found my brother medical officers and the civil practitioners of the island for the most part agreed about the pretensions of mercury as a cure for the disease,—pretensions which had had their rise in the extravagant opinions entertained of its merits among the Indian medical men. Thus, the rule that associated dysentery and the mineral in their practice, I found to be "absolute" and unquestioned. My own experience, however, of its control over the disease, at first suggested doubts of its curative influence at all; and, latterly, convinced me that it was not merely inoperative, but prejudicial in the extreme. So far from the tenderness under pressure giving way, the tenesmus and tormina subsiding, and the blood and "corruption" composing the stools giving place to normal dejections under its use, the very opposite of all these was the case, in proportion as the poison was pushed and continued; and this so much as a rule, in my own practice, that I began, at length, to suspect the mineral as at the bottom of the mischief, and, in the end, to be unable to disconnect the two.(a) In order to avoid jumping to hasty conclusions upon the point in question, I administered the mineral in varied forms and doses —by the mouth and by inunction,—in two grain doses and in twenty; and, as a general rule, with the same results in most cases,—to wit, an aggravation of the irritative action already going on in the mucous membrane,—results which, as I have already said, I should have looked for from *priori* reasoning; and, for these considerations:—1st. That the state of the blood in dysentery is the opposite to that in which mercury is found by experience to be beneficial, being one of dyserasy, and in which abnormal elements are superadded. 2ndly. That I believe the natural tendency of mercury is to irritate all mucous membranes even in health, and greatly to aggravate irritation and inflammation when already present in the same.(b) Such, I believe, to be the explanation of the poverty of its influence over mucous inflammations in general—a position, I am well aware, in which I shall not be supported by the general voice of the Profession; but, of the soundness of which I myself entertain no doubt.

What I have had to offer in relation to bleeding, leeching, and mercury, in this disease, is not less appropriate to the use of blisters for the same; in a word, that they are eminently impotent, if not injurious, in their operation.

So much for the worthlessness of the three most potent and valued agents in healthy inflammation, when addressed to the disorder now under consideration; and, if this alone be not a strong ground of suspicion as to the specific character of the action giving rise to it, I know not what stronger to adduce.

But, as I am not writing a *treatise* upon dysentery and its management, it would be foreign to my present object to enter further into what its essence *does* consist in, or to discuss at greater length the question, what treatment *is* adapted to its cure?(c)

Devonport.

(a) "During the slave trade, dysentery was, and even now is among the numerous small vessels engaged in this disgusting traffic, the chief pestilence; one-half of those conveyed in those floating receptacles of misery, on some occasions having died of it during the passage across the Atlantic." —Copland, ut supra, p. 669.

(b) Dr. Copland has briefly alluded to upwards of fifty different epidemics of dysentery occurring in various parts of Europe, from the fourth century down, in each and all of which the disease was, or should have been regarded as, ataxic in character. I say, should have been so regarded, because, although antiphlogistic measures are described as having been instituted in the treatment of some of them, I am by no means satisfied of the applicability of such to the conditions for which they were prescribed. Thus, in speaking of the epidemic "prevalent in Dublin and the vicinity in the autumn of 1825," we are told, that "it was of an asthenic and complicated form, and was very generally treated by bleeding, in robust persons, at an early stage."

(c) "We in vain endeavour," observes Dr. Abercrombie, in reference to acute dysentery, "to find our way amid the various courses that have been proposed for the treatment of the disease."—"Diseases of the Stomach," &c., p. 268. May we not fairly set this down to the universality with which it has been regarded as, and combated with, the measures applicable to healthy inflammation?

(a) An illustrious authority in medicine has well said, "To arrive at any certainty in judging of things useful and hurtful, it is requisite that we attend, with the utmost circumspection to the nature of the disease, else, that will very often be attributed to the medicines given which was owing to the disease only"—(the converse of the rule, of course, being a necessary sequence.)—*Van Swieten's Commentaries on the Aphorisms of Boerhaave*, Introduction to Vol. I., Pp. 26-27.

(b) Bretonneau has some interesting remarks in his work on the "Diphtherite," on the "poisonous action of mercury." "Administrées," says he, "sous toutes les formes, quelquefois pour combattre des prétendus symptomes syphilitiques qui eussent cède aux moindres soins de proprete, les purgatives mercurielles peuvent occasioner des phlegmasies ulcereuses, graves et rebelles, de la peau et du tissu muqueux: souvent, les os eux-mêmes se trouvent aussi affectes." Bretonneau instituted a series of experiments with mercury upon dogs,—with the following results,—that the diarrhœa which is set up in them persisted after the withdrawal of the mineral; and was followed by frequent bloody and mucous stools, marasmus, and death. Gastro-intestinal mucous membrane discovered, *post-mortem*, red throughout. When the dose was pushed as far as it could be carried, the same membrane became pale, instead of red, and attenuated —muscular and peritoneal coats the same. In nearly all the cases which he subjected to this ordeal, there ensued, after a while, "Liquefaction et la discoloration du sang, la prostration des forces, le marasme, et la mort." —P. 205.

What, then, ought we to look for, from the administration of this poison in an already intensely irritated state of the intestinal mucous membrane, and, above all, when introduced into the system in Anglo-Indian doses? In diseases of irritation, we shall almost search in vain for a medicine more hostile to the system, and to the particular structure involved, than this baneful irritant and poison.

Dr. Cheyne, at home, was eminently dissatisfied with mercury, positively as well as negatively, in its application to this disease. Dublin "Hospital Reports," Vol III.; and Mr. Annesley, in India, denounces its employment in the modern Anglo-Indian fashion in the most decided language.—*Vide*, Diseases of India.

(c) I may briefly mention here, in passing, that I believe *opium*, in one form or other, to offer a larger promise of success in every variety of dysentery, than all the other agents in common use for it put together, provided the system be not further depressed by abstractions of blood, and that attention, at the same time, be paid to the all-important consideration of supporting the patient's strength, instead of sinking it by evacuants. I have stumbled upon a remark, in a respectable authority of the last century (Kirkland "on Child-bed Fevers"), very apposite to the present subject, as well as suggestive of the inference, that Dr. Kirkland, as a physician, was in advance of the age in which he wrote. It is this: "I believe there is no kind of fever which will not be moderated by its use" (that of opium); "for if, in inflammatory fevers we join small doses of it with antiphlogistics, and in putrid fevers with antiseptics, we shall frequently prevent the disease having violent effects, and give the proper medicines a better opportunity of accomplishing the intention desired."

"Were the same cases" (of dysentery) "again to be placed under my care, I would not hesitate to give opium in doses of four or five grains, as it was the opium chiefly that seemed to arrest the progress of the inflammation."—Cheyne, Loc. Cit.

See also Dr. Copland's remarks upon the value of opium alone as an antiphlogistic in "some forms of inflammatory disease, in which bleeding would be improper," and in which cases he is persuaded that opium is of itself equal to the cure.—Article "Puerperal Fever," "Dict. Prac. Med."

ON THE USE AND ABUSE OF NITRATE OF SILVER DROPS TO THE EYE.

By T. WHARTON JONES, F.R.S.
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Every now and then cases come under the notice of the ophthalmic practitioner, in which the conjunctiva of the lower half of the front of the eyeball and that of the lower eyelid are dyed of a dirty olive-green colour. At the same time that it is thus dyed, the conjunctiva is callous, and often so shrunk that there is scarcely any inferior palpebral sinus left. This state of the conjunctiva is the effect of the long-continued employment of a solution of nitrate of silver dropped into the eye.

Such cases are an evidence, first, of an improper method of applying remedies to the eye very commonly followed; and, secondly, of a misconception of the *rationale* of the operation of the remedies.

Having recently met with some very marked cases of the kind referred to, I am induced to make a few remarks on the mode of applying drops and ointments to the eye, and on their mode of operation.

Mode of Application.—The discoloration of the conjunctiva being confined to the lower half of the front of the eye and inner surface of the lower eyelid, is an evidence that the nitrate of silver solution, which is merely dropped into the lower palpebral sinus, never reaches the upper half of the eyeball, the inner surface of the upper eyelid, and the superior palpebral sinus. Now, this is a very ineffectual mode of applying remedies to the inflamed conjunctiva. To obtain full advantage from any eye-water, drop, or salve, in conjunctivitis, its application should be so managed that it may come into contact with the whole surface of the conjunctiva; and, for this purpose, when it is a solution which is to be dropped in, the eyelids are to be so drawn from contact with the eyeball that the fluid may readily spread itself under them and all over the front of the eyeball, this being promoted by alternately moving the eyelids to and from each other; or, supposing an ointment to be applied, care should be taken to insinuate a small quantity underneath the upper eyelid, whereupon the ointment will readily spread itself, not only underneath the upper, but also underneath the lower, by slightly rubbing the eyelids over the eyeball.

Operation of Remedies to the Eye.—In the first place, it is to be recollected, that it is only in inflammation of the conjunctiva, and in superficial inflammation of the cornea, that stimulating applications, as they are called, are of service. They are unconditionally hurtful in the internal inflammations of the eye. The long-continued use of nitrate of silver drops, whereby the conjunctiva becomes stained, appears to be founded on a notion, that the application has some special unconditionally sanative virtue, so that if it be only used long enough it will effect a cure. In a late number of this Journal, I endeavoured to explain the mode of operation of drops, ointments, etc., in pustular inflammation of the conjunctiva. I would now add, that if an inflammation of the conjunctiva does not quickly yield, more ill than good is likely to result from a persistence in the use of drops, etc., and some modification of the treatment ought to be adopted, suggested by the circumstances of the case, in order to bring the part affected into a state in which it may prove more readily susceptible to the stimulating remedy.

It is not to the purpose to say, that the nitrate of silver solution should never be used as an application. All the benefit that can be derived from its use may be effected without risk of dying the conjunctiva; while other applications, though they may not dye the conjunctiva, will, if as long and as improperly persisted in, prove not less prejudicial in other respects.

Yellow Fever in Demerara.—Accounts from Demerara to 9th May are—Yellow fever increases in malignancy, and is proving more than ever fatal. It is attacking all classes, and all persons who have means or opportunity are said to be flying from the colony. The troops continue healthy, and are still prevented from mixing more than is absolutely necessary with the inhabitants of the town.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

By JOHN L. MILTON, Esq., M.R.C.S.

CANCER.—SECOND RELAPSE.—THIRD OPERATION.

We have already, in speaking of the removal of a cancerous tumour from the jaw by Mr. Simon, (a) expressed the opinion, that the decision of the difficulties which now surround the question of the removal of cancerous growths would be most rapidly and surely attained by the accumulation of full and detailed hospital reports.

We also, in the same paper, attempted to give the reasons why the surgeon should rather lean to removal than to non-interference; and, as many of our readers may not have seen the paper in question, we trust we shall be excused for giving a brief extract from it. The grounds for operating there put forward are:—

1. Operating undoubtedly saves some patients, and in others is followed by no return of the disease for many years; thus insuring a long interval of ease, and some prolongation of life.

2. When the disease does return, it is not more fatal—for that is impossible—than at its first appearance; and its being more rapidly fatal can scarcely be, in common humanity, considered as an objection, as then the struggle is sharper, and sooner ended.

3. It is better to save even one patient out of twenty, than to lose them all without a struggle; for it may be assumed as nearly a general rule, that at the period when patients will allow the operation to be performed, the disease is always so far advanced, that it would of itself destroy the patient.

4. Most of the operations for cancerous disease are not of a nature to endanger life; and, owing to the discovery of chloroform, not likely to be attended with severe suffering.

Finally, the exact proportion of cases in which cancer returns after removal by the knife, to those in which patients live the rest of their days free from its invasions, is not well known; and, till this is established, no part of the question can be looked on as satisfactorily settled.

Mr. Skey lately operated on a patient, the nature and history of whose case seems to us calculated to throw some light on this subject. From the clinical remarks made in the operating theatre by Mr. Skey, we learn,—

That the patient, a middle-aged man, with a strong disposition to cancerous growths, first presented himself for advice last October twelvemonths, with a suspicious tumour in the upper lip, which Mr. Skey decided on removing. This was done, and the man left the hospital apparently free from disease.

He again presented himself in the summer of 1851, with a scirrhous tumour on the right side of the lower jaw, which Mr. Skey also proposed to remove, considering that it is better to attempt extirpation, when there is any chance of doing so satisfactorily, than to stand by and allow the disease to develope itself. Being about to leave town, he requested Mr. Stanley to undertake the task, which this gentleman at once did. The operation was interrupted by the patient exhibiting some serious effects of the influence of chloroform, under the action of which he had been placed, and it was not till the next day that it could be completed.

He again seemed cured, and left the hospital, with nothing but the cicatrices of the operations in testimony of his disposition to cancer.

But, in January last, he again made his appearance, prepared to suffer anything rather than endure the continuance of the disease which had unfortunately again manifested itself in the form of a small, hard tumour, near the cicatrix of the former one, and apparently attached to the jaw. He had made up his mind to have this removed; but this time Mr. Skey coupled his assent with the proviso, that his colleagues approved of such a measure.

They did so, and accordingly, on Saturday, February 7, Mr. Skey extirpated the tumour. On examining the surface of the jaw there was enough found to excite suspicions that the bone was diseased, and accordingly the greater part of it was at once removed. The man was not placed under the influence of chloroform in consequence of his having suffered so severely and dangerously at the previous operation; but he bore this trial with the most heroic courage.

Mr. Skey remarked, in conclusion, that the prognosis was necessarily most unfavourable, but that, on reviewing all the circum-

(a) *London Medical Gazette*, Dec. 5, 1845.

stances of the case, it appeared that no other plan could be taken up; that the patient was confident and full of hope, though the danger of his condition had been fairly pointed out to him, and that he was willing to face the pain and hazard of the operation, convinced that, if he could not be cured, he would, at least, gain some temporary alleviation of his sufferings.

ST. MARY'S HOSPITAL.

By HARVEY LUDLOW, Esq., M.R.C.S.E.,
Late House Surgeon to St. Bartholomew's.

AMPUTATION AT THE SHOULDER-JOINT.

The period at which amputation for injuries should be performed, has been discussed with zeal and ability by surgeons of the highest reputation; and, although it is impossible to lay down a law universally applicable, and even difficult to a degree to establish rules for general guidance, much has been done to elucidate the subject by the large experience which surgeons of unwearied industry and great professional skill have adduced respecting it. Still, there is no department where more is left to the judgment of the practitioner in each particular instance. Indeed, cases occur on which accumulated experience yields no decisive light, and respecting whose treatment wide observation seems to establish nothing but uncertainty. It is greatly to be regretted, that the statistics of military and civil practice,—statistics, separately of the utmost value,—have been indiscriminately confused together, and the resulting inductions have consequently been impaired in utility, and not free from error. The surgery of the battle-field, excellent as its experience may be when self-applied, affords no accurate illustration of the treatment to be pursued in civil practice; and doubtless, in the exigencies and confusion unavoidable to the conflicts of war, limbs have been sacrificed which, in ordinary circumstances, might have been saved, or at least considered worth an attempt at preservation. In one important particular, however, military and civil surgery agree. As far as I know, the experience of both is decisive respecting the advantages of primary over secondary amputations in injuries which demand removal of a limb. Mr. James, indeed, remarks, in a valuable paper published in the 17th volume of the "Transactions of the Provincial Medical and Surgical Association,"—"Secondary amputations in civil practice, and performed under favourable circumstances, were and are, on the whole, attended with less mortality than primary;" but, if we consider how few are the instances in which secondary amputation is performed under favourable circumstances, this statement is at once altered in aspect, and reduced to narrow dimensions. If it has been decided to amputate a limb in consequence of the severity of the injury, I believe few surgeons in London would recommend the operation to be deferred till the patient is struggling in the stages of hectic and exhausted by profuse suppuration. How disastrous in their termination such conditions become when the shock of an amputation has been superadded to them, is evident from the mortality of secondary operations, in those cases where the attempt to preserve limbs has been followed by excessive suppuration and hectic, and where death results from an operation whose assistance comes too late.

The details of the following case exemplify one of the most prolific sources of fatality in primary amputations,—the collapse produced by a severe injury, and by the operation which that injury necessitates.

COMPOUND COMMINUTED FRACTURE OF THE LEFT ARM. AMPUTATION AT THE SHOULDER-JOINT.—PROSTRATION.—DEATH IN 18 HOURS.

Elizabeth Hill, aged 4, was admitted into St. Mary's Hospital, under Mr. Coulson, at 9 a.m., March 8, having suffered a compound comminuted fracture of the left humerus. She had been run over by an empty truck on the Great Western Railway, about fourteen miles from town, and was brought up to Paddington by train.

The arm was literally smashed. The soft tissues were separated from the bone by a laceration which had rent the skin on the front of the arm, along the inner edge of the biceps muscle, and extended from the acromion to within an inch of the elbow. The bone itself was shattered in fragments from the elbow, into which a fracture extended, to within an inch and a-half of the shoulder-joint. The anterior muscles of the arm were severely torn, but the nerves and artery appeared to have escaped, as there was no hæmorrhage at the time of her admission, and she could move her fingers. When brought to the hospital, she lay in a state of collapse, silent, and heedless of what was passing, the surface of the body being pale and cold, and the pulse feeble. It was, however, stated by those who brought her, that she had lost very little blood, either at the time of the accident, or since its occurrence, but that she was an unhealthy child, and had suffered a short time previously from diarrhœa, and an inflammatory affection of the chest.

Amputation was, of necessity, deferred, her condition not being such as to warrant its immediate performance. In about two hours, however, Mr. Coulson considered that the child had rallied sufficiently to sanction the proceeding, and he accordingly disarticulated the limb at the shoulder joint, the patient being narcotised with chloroform. The operation was modified, in consequence of the injuries inflicted on the soft parts, the principal flap being formed by the deltoid, which was united to such tissues on the inner side of the arm as remained sufficiently uninjured for the purpose. The edges of the wound were brought together with sutures and strapping, and a bandage was subsequently applied. During the operation, the subclavian artery was compressed by Mr. Bullock, against the first rib, and scarcely any blood was lost.

After her removal to bed, the patient continued in a prostrate condition, blanched and powerless. She was ordered tinct. opii miii., ex mist. camph. ʒj., to be taken immediately, and to be supplied, *ad libitum*, with milk, wine, and strong beef tea.

She never rallied; became restless and irritable twelve hours after the operation, and died at 6 a.m., March 9.

Examination of the body thirty-three hours after death,—showed venous congestion on the surface of the brain; the existence of pleuritic adhesions, apparently not old, on the right side of the chest; an empty state of the inferior vena cava, and general anæmia of the heart and great abdominal organs. No other morbid appearance presented itself. For these particulars I am indebted to the kindness of Mr. Bullock, the house-surgeon.

In this case it will be observed, that the operation was deferred, in consequence of the prostration of the patient at the time of her admission. Now the propriety of such postponement has been called in question. It is urged by some surgeons, that it is hardly possible for the system to suffer from a twofold shock at one and the same time, and that, consequently, during prostration, limbs may be removed with safety, inasmuch as the constitution will not suffer from the effects of the operation while occupied by the shock of the injury. With reference to this point, Mr. Travers remarks, ("Constitutional Irritation," p. 144,) "The removal of a mutilated limb, provided the interval of time be so short as to identify the operation with the injury, anticipates, or, at least, infinitely diminishes, constitutional irritation." And, at page 145, "The shock of the injury covers and identifies itself with that of the operation promptly performed."

It does not appear, however, that these considerations have hitherto succeeded in persuading surgeons to operate during the continuance of prostration. Mr. Fergusson ("Practical Surgery," p. 149) says: "It is a maxim almost invariably applicable, never to amputate while the patient is in a state of shock: and, though occasionally it can be deviated from even with success, there can be little doubt as to the wisdom of the delay." In the paper which has been already adverted to, Mr. James states, "that, if amputation is performed while collapse continues, it is a matter of general assent, that it is likely to augment the tendency to death; yet he has known one instance in which amputation was successful, when all attempts to rouse the patient from a state of increasing prostration had failed." Such examples must be rare; experience, however, furnishes but little information on the subject, for few have had the temerity to perform capital operations on patients already trembling between life and death, and whose condition is such, that a few hours may possibly place them beyond the reach of all surgical assistance. Nor is it likely, that a state so desperate would become less so by removal of the shattered member whose mutilation produced it, but rather that the tottering powers of nature would be completely upset, that a heart beating feebly would cease to pulsate, and the faint remains of life be extinguished by the impulse of a fresh injury,—an impulse which, in all probability, the constitution would be powerless to withstand, and unable to counteract. It was scarcely to be expected, that the girl whose case has been related would survive the consequences of the accident. She had recently recovered from an acute inflammation; the injury was extremely formidable; while the feeble vitality of her system was manifested by the phenomena that presented themselves during life, and the anæmia exhibited by the body after death. Fatal, however, as was the termination of the case, it may be doubted whether one more favourable would have followed the earlier performance of the operation, or whether any treatment could have been adopted more likely to have afforded a successful result.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

KENT OPHTHALMIC HOSPITAL.

By JOHN WOOLCOTT, Esq.,

Surgeon to the Hospital.

MELANOSIS OF THE LEFT EYE—EXTIRPATION OF THE GLOBE.

Frances Sunnocks, aged 47, married, native of Strood, Kent, of delicate constitution and sallow complexion, was admitted into the Kent Ophthalmic Hospital, Maidstone, under the care of Mr. Woolcott, on the 29th of January, 1852. She states, that originally she enjoyed good health, but, of late years, has suffered much from dyspepsia. Twelve years ago she lost the sight of the left eye, and has had occasional attacks of inflammation in it since that time; but it was not until six months prior to her admission that a small fleshy-looking tumour, about the size of a pea, presented itself on the sclerotica, just below the cornea, on the inner side. The pain in the eye, at that time, she describes as smarting; but pain in the head was what she most complained of. Since then, the pain in the eye and the tumour have gradually increased. Has had six children, all of whom are alive and healthy. Upon examination, the following appearances and symptoms were reported in the Case-book.—"An opaque lens, of dirty yellow parchment colour occupies the pupil, and is pushed with the iris against the cornea, obliterating the anterior chamber, pointing out the existence of some disease at the back of the globe, thrusting these parts forward. A solid fungous mass, of a light purple colour, ulcerated on the surface, and giving rise to a sanious discharge, protrudes through the lids, about the size of a walnut, springing from the sclerotica, just below the inferior margin of the cornea, on the nasal side. On the upper part of the globe, the sclerotica is thinned, and the choroid appears through. There are no glandular tumours of the neck or elsewhere. She complains of lancinating pain occasionally in the eye; excessive pain in the head, interrupting sleep; debility, and a broken state of health; countenance anxious and haggard. Ordered full diet; a glass of port wine daily, and quinine mixture three times a day. A lotion, with equal parts of liq. opii. sed. and water to be applied to the tumour.

Feb. 12.—The tumour having increased very much during the last few days, and the patient's health having been somewhat improved by good diet and gentle exercise in the open air, Mr. Woolcott, this afternoon, performed the operation for extirpation of the eyeball, the patient being under the influence of chloroform. An incision was made at the external commissure, and the palpebræ dissected back; the contents of the orbit were then removed in the usual manner. The bleeding from the ophthalmic artery was but slight, and soon ceased upon the application of cold water with a syringe. Pad and bandage were applied, and the patient was put to bed.

13th.—Slept well, and feels comfortable; pulse quick and full; thirst, and slight feverish symptoms. Liq. ammon. acet. ℥jss., antim. tart. ℈ss., mist. camphoræ ℥vj., M. ℥j., quartis horis sumend.

The patient went on gradually improving, and was discharged on the 1st of March, free from all pain, and much improved in health. She presented herself at the hospital the latter end of last month (May), looking well, and stated that she had not felt so well for many years.

The eye was sent to Mr. Quekett, at the Royal College of Surgeons, who kindly examined it with the microscope, and found it to be a case of melanosis, with the black pigment as yet sparingly developed. The preparation, No. 2255, in the museum at the College, very nearly corresponds with it. The tumour appeared to have originated in the sclerotic.

Medical Times & Gazette.

SATURDAY, JUNE 19.

THE EXTRA-URBEM LICENTIATES OF THE COLLEGE OF PHYSICIANS.

The "Protest" of the Associated Extra-urbem Licentiates of the College of Physicians, which we subjoin, is worthy of consideration, as emanating from a large and most respectable body of men. We cannot doubt that the College will do everything to meet the just demands of the provincial Physicians, and will consider them in the same light as its other Licentiates.

The main objection which Dr. Laycock, on behalf of the Extra-urbem Licentiates, takes to the new Charter, is, that the College demands testimonials of character satisfactory to the Censors. Dr. Laycock objects to this as at once a matter of supererogation and of injustice. He does not think that a provincial Physician, whose standing in the eyes of the public and the Profession may be equal to that of any London physician, should be required to forward testimonials to four Censors, whose acts are irresponsible, and from whose decision there is no appeal. In this we should quite agree with him, did we not think it a matter of primary importance that the College should reserve a legal power of refusing admittance to improper persons. Dr. Laycock admits, that "there are persons practising as physicians whose conduct renders them unfit to be incorporated with the general body." Yet, how are these men to be excluded without some such plan as that adopted by the College? For ourselves, we do not think any Extra-licentiate will suffer much loss of dignity by forwarding a statement of his position and his claims; nor do we think that the Censors would dare to exclude any one from the list, unless they were prepared with evidence in support of their conduct which they felt would be satisfactory to the Profession at large.

We suspect, however, that legally every Licentiate, extra and intra urbem, will, by the spirit of the Charter, be admitted to the membership at the very moment the Charter is granted, and that testimonials will be required only from those practitioners who have not yet joined the College in any form.

With respect to the two money objections, we certainly think some allowances should be made to the Extra-licentiates; but this matter is of comparatively little moment. As regards especially the Stamp-duty, however objectionable this may be, it would be injudicious to make so trifling a matter an objection to what is, as it appears to us, a great boon to all regular physicians in the kingdom.

We do not deem the new Charter the height of legislation. We think its machinery defective, and its organisation far too aristocratic; yet we regard it as a great advance, and as opening a door for the admission of fresh blood into the College, that must soon re-animate its sluggish members, and assimilate it to the progress of the time, and to the wants of the Profession. As an advance, and not as a finality, we accept the Charter; and if the Extra-licentiates are wise, they will do the same.

But we will allow Dr. Laycock to make his protest:—

"PROTEST OF THE ASSOCIATED EXTRA-URBEM LICENTIATES OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AGAINST THE PROPOSED NEW CHARTER.

"To S. A. Paris, M.D., etc. etc., President of the Royal College of Physicians of London.

"Sir,—The Committee of the Associated Extra-urbem Licentiates of the College have had the draft of the proposed new Charter under their consideration, and have desired me to communicate with you respecting it.

"The Committee observe, that it is proposed to incorporate the Extra-urbem Licentiates in a new College, to be called the Royal College of Physicians of England, on the following conditions:—

"1. That they present testimonials of character satisfactory to the Censors. 2. That they pay to the funds of the new College the sum of fifteen pounds fifteen shillings; and 3. That they contribute to the national exchequer by the payment of a stamp-duty.

"As to the *first* condition, they desire me to say, that the Extra-urbem Licentiates already hold letters testimonial as valid in law as the Charter of the College itself; and they are of opinion,

that the rights attached to those letters testimonial ought not to be placed at the arbitrary discretion of the 'Censors.' The Committee also wish me to call your attention to the fact, that they were only granted upon the production of testimonials of character satisfactory to an Examining Board, constituted of yourself, (or your predecessor in the chair,) and three senior Fellows of the College, and are duly signed by the Examiners according to the statute; and that, consequently, any further testimonials are quite unnecessary, unless it be proposed to extend the inquiry to the Fellows and Intra-urbem Licentiates.

"As to the *second* condition, the Committee desire me to say, that they are willing to contribute a proportion of such sums of money as may be found necessary to place the proposed New College in a sound and honourable position; but they would also urge, that it is manifestly unjust to demand the same payment, on admission, from the physician legally qualified, by compliance with the statutes of the realm, as is demanded from the physician not so qualified.

"As to the *third* condition, the Committee cannot comprehend why the incorporation for the public good of a body of professional men, already heavily taxed, should be made the occasion for inflicting further taxation. In addition, also, to the fact, that the majority have already paid a stamp-duty on their diploma, the Committee would state, that the University of Oxford Commission recommends the *abolition of the stamp-duties* on matriculation, and on certificates for degrees; thus affording an example worthy the consideration of the College.

"The Committee would add, that they deeply regret there are persons practising as physicians whose conduct renders them unfit to be incorporated with the general body; but, as such are to be found in every class, they think it both impolitic and unjust to single out one class or more for special inquiry, leaving the others exempt. Further, however unfit any one may be, they think no one should be deprived of his position and privilege by an irresponsible Board, however designated, nor without an impartial inquiry, according to legal forms, and under the guidance of a written code of medical laws, to be appended to or embodied in the Charter.

"The Committee observe, that it is now ten years since the organisation of the physicians of England was first undertaken by the College, and that this is the third draft Charter which it has edited. It is obvious, that this will never pass into a law, and that another attempt will have to be made. On every account the Committee regret these repeated failures, being convinced that they are injurious to all parties, and they cannot but urge most earnestly on the College, the propriety and wisdom of ascertaining, by full and free communication, the feelings and wishes of the physicians of England, both in London and the provinces,—not only as to the terms of incorporation, but also as to the future government of the College; so that they may be all united into one body, jealous of the honour of the Profession, able to defend and maintain its dignity, zealous for the advancement of medical science, and anxious for its application to all those great improvements in social economy which the age so earnestly demands.—
—I have the honour to be, Sir, your most faithful servant,

"THOMAS LAYCOCK,

"Hon. Secretary to the Associated Extra-urbem Licentiates.

"York, June 10, 1852."

THE BURMESE CAMPAIGN.

In May, 1824, the city of Rangoon surrendered at discretion to the first assault of a British army. A noble force scaled, with irresistible impetus, the steep heights of Shoey-Dagon, and drove down the Burmese like sheep. That brilliant feat of arms commenced, and, unhappily, finished, the campaign. For eight long months after it, the victors remained pent up in their narrow fortress, blockaded by the elements, and assaulted by an enemy more fearful than their human foes. With the tremendous rains of the south-west monsoon beating through and through their half-formed camp, the soldiers, smitten down by famine and by fever, died by troops. Between May, 1824, and February, 1825, the unconsecrated burial-places about Rangoon received the bodies of sixty British soldiers who fell in battle, and of more than two thousand who died ingloriously in the pestilential hospitals.

It appears almost incredible that this dreadful lesson should have been thrown away, and that, after nearly thirty years' occupation of Tenasserim, and after full investigation into the Burmese character, the Indian authorities should wantonly and unnecessarily have commenced another Burmese campaign at the very season when war is impossible, and when victory becomes more fatal than defeat. As a military step, the occupation of Rangoon, when advance from it is prohibited, is a mistake. It is a mere sacrifice of men's lives to the fury of the monsoon, and to the malaria of the rainy season. As to any effect being produced on the inert empire of Burmah by this attack on its outpost, it is folly to expect it. The Burman will surrender when the advancing force menaces the walls of Ava, and not till then.

From the middle of May to the end of September, our troops will be quartered in Rangoon in temporary barracks, amid torrents of almost incessant rain. The prodigious quantity of rain which falls during this time is something incredible—one hundred and fifty inches is a moderate monsoon; it is said to reach sometimes to two hundred, and even higher. In the single month of July, more rain has been known to fall than in two years in England. To men unaccustomed to such a climate, badly sheltered, and exposed to the inevitable hardships of garrison duty in time of war, such a season, in spite of all precautions, must be sickly. If the Burmese have not lost their ancient spirit, they will throng beneath the stockades of Rangoon, and keep our distressed troops continually on the alert. The scorbutic dysentery, and the terrible remittent fever, so famous in the former campaign, must re-appear, and, unless immense exertions are made, will be as fatal as in the former war.

If the Indian Government had simply fortified Moulmein against surprise, and had waited till October, they would have had before them six months of cool and beautiful weather, and might have finished the campaign in a few weeks. The *prestige* of an early and rapid blow, so important in the Sikh war, was unnecessary in the Burmese. The two nations are altogether different; and the hesitating policy that was so fatal in 1848 in the Punjaub, was exactly the measure suitable in 1852 amidst the swamps of the Irrawaddy.

There are, however, two circumstances which give great advantage to our arms, and which may possibly in part avert the fatal consequences of the Expedition. One, of course, is the use of steam, by which provisions and munitions may be rapidly conveyed to Rangoon, and sickly troops may be removed or strengthened. The second and equally important difference between this and the former war is, that, south of Rangoon, there is now a friendly population, accustomed to our rule, and disposed to hail the British advent as a step towards the restoration of their own dynasty, and the restitution of their ancient rights. It was, no doubt, in part to confirm the Peguers in their allegiance, and to protect them from forays, that the Indian Government has thus attacked Rangoon. From Moulmein and the adjoining country, provisions of various kinds may be obtained; not, indeed, beef and mutton, but rice of highly nutritious quality, fresh vegetables, and milk. Arracan and Chittagong will also pour in their stores, and, with ordinary exertions, the garrison at Rangoon will not starve on half-putrid flesh, as they did in the last war.

We shall soon see whether the Indian Government, that "splendid anomaly,"—in whose wars the rule seems to be, that victory crowns a series of mistakes and disasters,—has energy enough to meet the present emergency, and to maintain the war it has commenced against the elements. The war with the Burmese will not begin till October; till then, the conflict is with the deluge from heaven and the emana-

tions from the earth. Earnestly do we trust that our forebodings may be erroneous, and that the Indian Government, in plunging headlong into this war, has carefully provided for its inevitable wants.

THE NEW BOARD OF MIDWIFERY AT THE COLLEGE OF SURGEONS.

The Council of the College of Surgeons has announced its intention of appointing a Board of Examiners in Midwifery. This Board, we understand, is to consist of four persons: a Chairman, who is to be one of the Vice-presidents of the College; and three gentlemen practising midwifery. We can only look upon the appointment of such an Examining Board as an indication, that the science of midwifery—for what long remained only an art, has latterly, through the application of physiology, risen into the position of a science—is now taking the place which its importance deserves in the estimation of the Profession. In order to give weight to such a Board, it must be composed of the very best obstetricians — in a scientific as well as practical point of view—which the Metropolis affords; and, to secure the services of such persons, of course, it is only right to hold out a fitting compensation for the use of their valuable time. We question very much, however, whether the Council's idea of liberality is such as to inflame the desire for the appointment in the minds of the leading men in in this department. The Chairman of the Board, as one of the officers of the College, is to be provided for by an annual salary, which we have no doubt is ample enough. The three gentlemen who are to constitute the Board are to be placed on much shorter commons. The fee for examination is to be three guineas. Of this sum, the College takes *two*, and offers to divide the remaining twenty-one shillings among the Board—just seven shillings each. This sum, small as it is, might yet be considered sufficient, if the examination were made compulsory. On an average, three hundred surgical diplomas are granted in the year; if the Midwifery Licentiateship were added to each of these, the Examiners would get three hundred guineas among them, which would certainly not be too much for their time and trouble. But the examination is *not* to be compulsory, and this entirely alters the complexion of the case. The overwhelming majority of those who intend to practise as general practitioners pass through a midwifery examination at the Hall, and of course they will not pay an extra three guinea fee at the College. Supposing, however, one-third of its future licentiates go through the midwifery examination, the splendid sum of one hundred guineas, or thirty-five pounds per annum, will be the remuneration yielded to each member of the Board for weekly hours of worry, and for very much interruption to his practice! Very often, we have no doubt, there will be only a single candidate—and, poor unhappy fellow! we can picture his sufferings—the perfectly savage manner in which he will be interrogated, trembling long upon the very edge of being plucked; for men are men although they be examiners; and we ask deliberately, what must be the feelings of such terrible potentates, after finding themselves dragged, perhaps, miles from their homes at a critical moment for the munificent reward of seven shillings? How could such a Board be hospitable? It might be argued, however, that the honour of the appointment is considered a sufficient reward. Perhaps so. Let the appointment be purely honorary, and all objections cease; but honour cannot be mixed up with seven shillings! If the examination in Midwifery at the College of Surgeons is to be a superior one, the Council must at least treat their Examiners as gentlemen. Why should they not stand on the same footing as the Surgical Board,—the gentlemen composing which receive individually some hundreds a-year as their share of the fees? at all events, we cannot see what justice there is in the College claiming the oyster themselves, and offering little better than a shell to those who are to do the work for them.

REVIEWS.

Manual of Human Physiology for Students; being a Condensation of the Subject, a Conservation of the Matter, and a Record of Facts and Principles up to the Present Day. To each subject are appended, in Notes, Summaries, in Rhyme, of the Composition of the Fluids and Solids, etc. By John Morfold Cottle, Licentiate Royal College of Physicians, M.R.C.S., etc. etc. Small 8vo. Pp. 297. London: Highley and Son.

A good manual is a really useful book. The student of medicine has, in three years, to learn the principles of a host of sciences. To refer him to the original sources of knowledge to attain those principles is absurd. Count the days and working hours included in his three years, and say, could he read a tithe of the important original memoirs which contain facts it is essential he should be acquainted with.

For a manual to be a really useful book, 1st. It must contain the facts discovered in, and the general principles of the science established at, the date of its publication. 2nd. Those facts and those principles must be concisely and clearly stated. 3rd. As far as possible, it should contain references to the original sources from whence the facts, etc., are drawn.

For a man to write a good Manual, then, he must be *au courant* with the literature of his subject; he must be able to estimate the value of the materials at his disposal, and to condense those materials, and then to combine them so as to form a unity, and not a patchwork; and, finally, to express himself easily, concisely, and clearly. Now, we have tried the Manual before us by the above test, and have found it sadly wanting. Here is a specimen of the Author's attempt to be original:—

"The difference in the modes of combination of the atoms of organic and inorganic bodies may be better understood, if for the time being we name the compound atoms of which the bodies themselves are formed, *bricks*. Under such licence of speech, then, we will call the compound atom of the chief of all animal proximate principles, albumine, an *organic brick*, and sesquicarbonate of ammonia, which is an inorganic salt composed of the same proximate elements as albumine, an *inorganic brick*, we will suppose this latter *brick* to be composed of seven elementary angular bodies, which shall represent the seven elemental atoms of the compound atom of sesquicarbonate of ammonia, each having so many flat surfaces, or rhombic plates, that, when one of the seven (carbon) is united to two others (oxygen), their planes so join as to form a perfect rhomb or cube (carbonic acid). When another of the angular bodies (nitrogen) is joined to the remaining three (hydrogen), another quadrangular body or cube (ammonia) is produced, and, by joining the two cubes together, you have an oblong substance of the shape of a *brick* (the sesquicarbonate of ammonia). For obvious mechanical reasons, when this body is knocked in pieces, or into its elements, it will first divide through the middle (into carbonic acid and ammonia), and then into its ultimate elements, the seven angular bodies."

Woodcuts are given to illustrate the various combination of triangles in different organic and inorganic *bricks*. Our author's dissertation on bricks and "concrete" occupies nearly eight pages.

Albumen is, according to Dr. Cottle, an organic *brick*, made up of 114 triangles.

Surely, Dr. Cottle's Manual would, if tried by court-martial, be ordered off to the triangle, it is so intolerably heavy; and he himself is ponderous as a brick; at least, such were our opinions on reading his eight pages on triangles, mortar, and organic and inorganic bricks. But, after we had read the subjoined lines, our opinion was altered, and

we saw that if Dr. Cottle was a brick, he was clearly a "jolly brick."

THE PHYSIOLOGY AND ANALYSIS OF ALBUMINE.

"This fruitful dame, from whom doth issue
The pabulum for every tissue,
Has for the alkalies a balm;
She also can the acids calm.
These and metallic salts involve
With her a tie that wont dissolve,
Save in excess, when she'd be fain
To re-dissolve the same again.
In like excess, you may confide,
That she'll take up a protoxide.
Weak acids, and acetic, proof
Will give, from her they stand aloof.
Heat throws her down; but ah! how strange!
When *weak*, she'll not by boiling change!
Seven from hydrogen 's but few,
Since oxygen gives twenty-two;
Sixteen from nitrogen; and see,
From carbon she has fifty-three.
From phosphorus thirty fractions come;
From sulphur full four times that sum."

It would have been well if the truth of the motto Dr. Cottle has chosen for his title page had been fully impressed on his mind before attempting a manual on Physiology; the motto is Psalm cxxxix. 5.

"Such knowledge is too wonderful and excellent for me; I CANNOT ATTAIN UNTO IT."

By the way, we find Dr. Cottle is a candidate for Bethlem. Judging from the circular by which he announced his advent in the Isle of Wight, we think him well qualified for the place.

The London Dispensatory: a Practical Synopsis of Materia Medica, Pharmacy, and Therapeutics. Illustrated with many useful Tables and Woodcuts of the Pharmaceutical Apparatus, by the late ANTHONY TODD THOMSON, M.D., F.L.S., etc., etc., etc. The Eleventh Edition. Edited by A. B. GARROD, M.D., Professor of Materia Medica and Therapeutics in University College, etc., etc., etc. London: Longmans. Pp. 1230.

We are much pleased with this edition of the justly celebrated work of the late Anthony Todd Thomson; and we hasten to recommend it as a valuable boon to the Profession. It is highly creditable to the editor, Dr. Garrod, who, while preserving as much as possible the matter of the author, has fully and ably indicated the changes which the progress of science has made in the Pharmacopœia. But it were needless to characterise a work now in its eleventh edition. Public opinion has already pronounced it good; and Dr. Garrod has materially enhanced its value. It ought to be in the library of every medical man who can afford to purchase so excellent a manual of materia medica, pharmacy, and therapeutics.

Lectures on Histology. Delivered at the Royal College of Surgeons of England in the Session 1850-51. *Elementary Tissues of Plants and Animals.* By JOHN QUEKETT, Assistant of the Museum of the Royal College of Surgeons. Illustrated by One Hundred and Fifty-Nine Wood-Cuts. 8vo. P. 215. Baillière. London: 1852.

THESE excellent lectures, and the accurate wood-cuts which illustrate them, were last year published in the *Medical Times*. Mr. Quekett has now carefully revised them, and added a considerable amount of new matter. The last two of Mr. Quekett's lectures published in our pages are not included in the present Volume. The type is unexceptionable, and the wood-cuts have come out exceedingly well.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

CHAIR OF THE PRACTICE OF PHYSIC IN GLASGOW.

DR. John Macfarlane, of Glasgow, has been appointed by the Crown the successor of Professor William Thomson in this chair. Dr. Macfarlane, as a practitioner, has long enjoyed a considerable local reputation in the west of Scotland, and as an author has been favourably known by his surgical reports. As a teacher, Dr. Macfarlane has still his reputation to make.

MEDICO-CHIRURGICAL SOCIETY.

ON THE APPLICATION OF THE ACTUAL CAUTERY FOR DESTROYING THE DENTAL NERVE BY MEANS OF ELECTRICITY.

On this subject Dr. Roberts read a communication at the May meeting. The application of the actual cautery by means of electricity in dental surgery was, so far as the author knew, a novelty. For the purpose he used a Grove's battery, the wires of which terminated in small portions of platinum, which were so disposed that the galvanic circle could be closed, and the wires brought to a white heat, by touching a small spring. By removing the finger from the spring, the process was reversed, and the wires became instantaneously cooled. Employed in this way, Dr. Roberts had found the cautery quite manageable, productive of no alarm, scarcely inflicting any pain, and, so far as he had yet observed, satisfactory in its results. The apparatus, which appeared remarkably ingenious, was exhibited.

Mr. Nasmyth had for many years discontinued the use of the actual cautery in caries of the teeth, because, though for a time successful in destroying the sensibility of the affected tooth, he had found its ultimate results to be most unsatisfactory. He had not himself employed electricity as recommended by Dr. Roberts, but his friend Dr. Dewar had, and he was sorry to add without benefit. Dr. Roberts's plan appeared very similar to one suggested by Mr. Harding, in the *Lancet*, for June, 1851.

TEMPORARY ALBUMINURIA AS OCCURRING IN THE COURSE OF CERTAIN FEBRILE OR OTHER ACUTE DISEASES.

Dr J. W. Begbie read a lengthened communication on this important and interesting subject. Temporary albuminaria was defined as the manifestation and continuance of albumen in the urine during a limited period, and unconnected with any serious organic change in the kidney. Dr. Begbie recognised three varieties of temporary albuminuria, each of which found appropriate illustrations in some well known conditions of acute disease. Thus, desquamative albuminaria, the first variety, was found in simple scarlatina, in erysipelas, and in Asiatic cholera. Inflammatory albuminuria, the second type, was illustrated by the condition of the urine, in the dropsy following scarlatina; while, according to Dr. Begbie, a third kind, or critical albuminuria, occurred in pneumonia, and in certain cases of typhus fever. In desquamative albuminuria, the occurrence of albumen was associated with the separation of epithelium, from the mucous surface of the kidney and bladder; and in scarlatina and erysipelas this was likewise connected with a desquamative change in the skin; and, in cholera, with a similar condition of the mucous coat of the intestines. Desquamative albuminuria was also found in some other febrile diseases; but these were, perhaps, the most frequent and familiar. The characters of the urine, under the microscope, (which were described in detail,) presented certain differences in different cases; but there were characters common to all examples of this affection, distinguishing it as a special form of albuminuria. Inflammatory albuminuria was characterised by the presence of renal tube-casts, often granular cells, and frequently of blood-corpuscles, in greater or less abundance, indicating a certain amount of renal congestion and disorganisation. This was the invariable type of the albuminous urine in the dropsy following scarlatina. This form of albuminuria might or might not be temporary; and probably, in some cases, led to permanent renal disease, especially when neglected or unskilfully treated. In most cases, however, it might be looked upon as a curable disorder. Critical albuminuria occurred about the period of resolution in certain fevers and acute inflammations, particularly in the abdominal typhus; and in pneumonia, it was distinguished, not only by the period of its occurrence, and the symptomatic changes with which it was associated, but also by the changes in the urine itself; viz., the precipitation of lithates, etc., as in the ordinary urine at the crisis of acute affections; likewise by the absence of the large quantity of epithelium and other microscopic elements alluded to. These were replaced in the critical albuminuria by a large number of very minute molecules and granules, which Dr. Begbie had been led to regard as the debris of the exudation from the lungs, or other organs, chemically unchanged. The critical albuminaria was therefore to be regarded as the evidence of a change taking place in the previously diseased organ during its restoration to a healthy state.

Dr. Christison said, that his own experience, though consisting of only scattered observations, went far to corroborate some of the results at which Dr. Begbie had arrived. He had not, however, found albuminuria quite so common in scarlatina as had been indicated; and he was inclined to think that, in this respect, as was com-

mon in many others, there might be a difference in different epidemics. In Heriot's Hospital, where he had observed an epidemic along with Dr. Andrew Wood, he thought it possible, that, in some cases at least, the strong derivation to the skin, practised so successfully by Dr. Wood, might have warded off the albuminuria. He strongly advised Dr. Begbie to watch those individuals having temporary albuminaria; he was inclined to believe, that the recurrence of the affection might in many cases be looked for, and that persons so affected too often fell a prey to organic renal disease.

Dr. Andrew Wood detailed, at considerable length, many interesting facts noted by him in the epidemic of scarlatina to which Dr. Christison had alluded. He had found coagulable urine in about one one-half of the cases in which a daily examination had been made. His experience, on some other minor points, differed from Dr. Begbie's. He attached great importance to Dr. Christison's observation as to the influence of treatment in preventing albuminuria; and, in proof of the power it exerted, he might mention, that, in the commencement of the epidemic, there had been a much larger proportion of cases with albuminuria, than towards its close, when he had proved the efficacy of the vapour-bath, and other means mentioned to the Society at a former meeting.

Dr. W. T. Gairdner remarked, that, from the period of his earliest observations in regard to diseases of the kidney, he had been induced to regard albuminuria as a species of catarrhal affection of the renal tubuli, or of the external renal passages. This view, morbid anatomy and clinical study had, in his experience, alike confirmed. Bright's disease he looked upon as the analogue of bronchitis or broncho-pneumonia in the lung. The three varieties of albuminuria Dr. Begbie had described, he (Dr. Gairdner) would prefer regarding as the same affection, differing only in the degrees of intensity, and perhaps from a few other circumstances not perfectly understood. He thought with Dr. Christison, that the occurrence of albuminuria, whether temporary or more permanent, was always to be regarded with suspicion; and he conceived that, if not indicating the actual occurrence of renal disorganization, albuminuria ought generally to be accepted as evidence of a tendency to that affection.

GENERAL CORRESPONDENCE.

SUICIDE BY STRANGULATION.

[To the Editor of the Medical Times and Gazette.]

Sir,—As the following case of "supposed suicidal strangulation" was effected by means exceedingly unfrequent, you will oblige me by giving it a place in the pages of your valuable and widely-circulated Journal. I am, &c.

P. L. Burchell, M.B. Lond., F.R.C.S. Eng.

I was summoned in haste on Sunday morning, March 21, 1852, at ten o'clock, to visit H. D., a man, aged 55 years, who, it was supposed, had destroyed himself. He was formerly a mechanic, but had of late followed no employment, having been supported by the benevolence of a maiden sister. He had lodged for many years in Ravencroft-street, Birdcage-walk, Bethnal-green, where he occupied a first-floor front room in the house of an aged couple.

I found he had been dead for some time, was in bed in a semi-recumbent position, with a silk neckerchief around his neck, tightened by means of the handle of a hearthbroom, which had been twisted half round from right to left, by which firm compression had been exercised upon the trachea, just below the cricoid cartilage; his head had fallen forwards, effectually preventing the head of the broom flying back towards the right side, by which the ligature would have become loosened, by impinging upon the left side of the face and chin; the face was turgid and livid, and a small quantity of blood had issued from the right ear; the tongue was not projected from the month, but some frothy mucus escaped from it; there was some slight ecchymosis in the track of the ligature, but the skin was neither lacerated nor excoriated, showing no unnecessary violence had been used,—the ecchymosis was much more distinct at the spot where the broom handle had pressed upon the trachea, indicating the great probability, that the force had been applied during life; his hands and arms were lying under the bed-clothes as during natural sleep. No *post-mortem* examination was thought necessary by the Coroner, William Baker, Esq., or jury, by whom the case was investigated. I, therefore, was not in a position to speak positively as to the exact cause of death, though certainly the circumstances pointed pretty clearly to strangulation.

From the evidence adduced at the inquest, it appeared that the sister, whose affection had supplied her brother's wants for a long series of years, had, within a few weeks, died in a lunatic asylum, where she had been confined for a short period, by whose death he came into possession of property amounting to about 120*l.* per annum, chiefly household; that an appointment had been made with him by his legal adviser for Monday 22nd, the day after his death, for the purpose of taking out letters of administration to his sister's will; that he had been in the company of that gentleman (who was present and gave his testimony) on the Saturday, the previous day, when H. D. had upwards of 20*l.* in gold and silver in his possession; that he came home in the evening at about his usual time, quite sober, and in his ordinary health and spirits, and asked his landlady, before retiring to rest, to take in a halfpennyworth of milk for him in the morning, and wished her good night as formerly.

At about half-past nine the next morning, as he did not make his appearance, his landlady knocked repeatedly at his door, (which was said to have been locked on the inside,) and called him; but, as no answer was returned, her husband repeated the summons with like effect; the latter then applied his eye to the key-hole, which, being opposite the bed, enabled him to see his lodger in the position before-mentioned; the door was immediately forced open, a policeman called in, and a messenger despatched for my attendance.

There were two or three circumstances, which gave rise to suspicions that the deceased had not come to his death by his own hand; it was questioned by some, if it were possible for him to have committed the act himself. I was appealed to, and gave it as my opinion, that it was quite possible, and I believed it was so in the present instance, and quoted some cases recorded, and, among others, referred to that of General Pichegru, one of Napoleon's generals, who was found strangled in prison by a ligature tightened by a stick, which had been twisted and fixed behind one ear, and alluded to in Dr. Taylor's excellent work on Medical Jurisprudence, but at the same time stated, that it was one of the most unusual modes adopted for self-destruction.

Another fertile source of doubt was the fact, that the money which was sworn to as having been seen on his person the day before, could nowhere be found; nor was it proved to the satisfaction of the jury, that the door of his apartment (though apparently forced, as stated by the landlord) had been fastened on the inside, and that, consequently, free access could not have easily been gained; the window was so secured, so far as it could be ascertained.

The deceased had lived with these people, who bore an irreproachable character, upon friendly terms for many years, and no disagreements had been known to have occurred between them. There had never been any evidence of mental disorder, though insanity prevailed in his family; he had always lived a very quiet, regular life, and was of extremely temperate habits.

In consequence of the doubts which could not be cleared up, the Coroner recommended an open verdict, namely, "that H. D. was found strangled in the manner above represented, but whether by himself or another, there was not sufficient evidence to prove," which was agreed upon by the jury.

Remarks.—Two or three points suggest themselves for consideration in this very interesting case, and it may not be unprofitable to say a few words upon the subject. If the man had been robbed previously to his reaching home, he would hardly have neglected mentioning the circumstance, had he been aware of it; and I should scarcely think an entrance could have been effected from without, and no evidence be left of it, as the fastenings were said to have been secure. The good character borne by the man and his wife who kept the house, forbids the idea that they could have been privy to any unfair dealing; and also the total absence of any indications of unnecessary violence having been employed, which are almost constantly present in cases of homicide, renders suicide much more probable. It is, therefore, in my estimation, most likely that the act was committed by himself,—perhaps, directly on the discovery of his loss, supposing any to have been sustained,—or from some other unknown cause affecting the mind.

The ligature not being so tight as immediately to stop respiration, might account for his being enabled to place his arms in the position in which they were found; and the falling forwards of the head, in consequence of the partially impeded respiration and circulation, producing a soporific condition, would, by this alteration of position, immediately have the effect of increasing the constriction, and produce almost instantaneous insensibility and death.

1, Kingsland-road.

MEDICAL BENEVOLENT COLLEGE.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am much gratified at the success that has crowned the efforts of the founder of this truly beneficent undertaking, and it cannot be denied but that a goodly sum has been collected, considering it is but through the humble labours of the Medical Profession, to which the clergy have kindly lent their aid.

I much regret when I see correspondents in other journals, such as "a Baptist," and others, raising objections to the proposed laws, although they may not be quite in accordance with the feelings of some of the sects of religion; yet they do not militate materially against the first great principle of this ever-desirable object; namely, the establishing an asylum for those who, alas! have been allowed no rest while carrying out the arduous and ill-paid duties of their profession.

I cannot but think, that while "a Baptist" "has his money in his pocket," he has but little ground of complaint, and that it would, in my opinion, have been more courteous if correspondents forwarded their objections to the Council, who would doubtless be ready to accept and willing to recommend any suggestions which were for the general welfare of the College.

I have as great faith in the desire of the Council to amend the laws as I have in the temperate expression of some of my medical brethren, who as yet have not made known their sentiments; and I am sure there is a wish to conciliate; and, if so, an opportunity will be afforded at the general meeting, when the proposed laws will be submitted for approval; and let us hope we shall be for once united, and get a home for the meritorious and the needy—it is within our command. I know the desire of the many, and the indifference of the few, which I think the following summary will show:—

Received by Hon. Local Secretaries—

Medical donations and subscriptions ..	£180	1	6
Lay do. do. ..	31	4	6
	£211	6	0

If such can be obtained from a district not rich, and from about half the borough of the Tower Hamlets, it may be conceived that the same, or even more, might be accomplished in more distant and wealthier ones. I cannot but express my surprise, on looking over some of the returns, not to find even one medical name recorded, and the paucity in others'; but more so that some of the large towns should be entirely without the pale of the roll, and that the philanthropy of some generous and influential individual has not been aroused to take up this godlike cause.

I should be happy to be the humble instrument to do so, were it in my power, but I can only induce gentlemen to adopt a very simple course,—the substance of the following resolutions and contribution-form,—and not fail to call, if not in Deputation of Committee, in their own right, in company of some friend:—

Moved by George T. Dale, Esq., seconded by Jas. Self, Esq.:—

"1. That the gentlemen present do form a Committee, with power to add to their number, for the purpose of aiding the funds for the establishment, and carrying into effect the objects of the Medical Benevolent College, proposed by John Propert, Esq."

Moved by R. Wallace, Esq., seconded by John Liddle, Esq.:—

"2. That two or more of the members of the Committee call upon every qualified medical practitioner in the Tower Hamlets, and all influential persons who may be willing to assist in the benevolent cause."

Moved by C. Tatham, Esq., seconded by C. J. Tomkins, Esq.:—

"3. That the Honorary Local Secretary be requested to have the foregoing resolutions printed, and that a copy of them, with the address, be sent to every gentleman previous to the call of the Deputation of the Committee.

"MEDICAL BENEVOLENT COLLEGE.

"Contribution-Form.

"Should the Deputation not have the pleasure of seeing you when they call, they will feel obliged if you will kindly fill up this paper in readiness for them. If you have already sent your contribution to the head office, be good enough to notify the same for the guidance of the Honorary Local Secretaries.

Name.	Address.	Donation.	Annual Subscription.

I am, &c. WILLIAM SELF,
Hon. Local Secretary, Tower Hamlets.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have read Mr. Newnham's letter regarding these two charitable institutions with some pain. In common with numbers of my brethren, I venerate the character of Mr. Newnham. I look upon him as a great example of the good one man may accomplish. You must not, therefore, imagine any unkind feeling is mixed with the following comparison of the "College" and the "Fund" which his letter provokes, while it disclaims such desire. That the Profession or the public will support, on a large scale, as "national institutions," two medical charities, is, I take it, a thing not to be hoped for, much less expected. Now, if one is eventually to fall, which, for the good of those for whose benefit both are established, should we desire to remain? Firstly, let us inquire which is most likely to be permanent. The "Fund" certainly realises many of the attributes of genuine charity, but, "like all human institutions, it is by no means perfect." The private character of its benefits, which Mr. Newnham eulogizes so much, is, in my humble opinion, one of its great weaknesses; the world sees not, knows not, the good it does. 'Tis glorious "to do good by stealth;" yet this practical country and age require something more than purity and philosophy in institutions of the character of those under discussion; and, despite all the care of its directors, the "Fund" may foster the beggar by profession, not the really deserving applicant; the secret sloth, or other vicious habit, not the industrious but unfortunate man; and the question arises, whether occasional grants of money might not be more usefully bestowed by a great national institution, uniting in itself all the sympathies of the Profession, and possessed of the essential requisites to secure public confidence, a "local habitation and a name." "In that building which I see, (the benevolent stranger may argue,) live and rest a certain number of my fellow-creatures; they have the means of enjoying plenty and repose after their unsuccessful battle with the world—(the mere ill-temper occasionally seen in every household, adverted to by Mr. Newnham, hardly, I think, needs notice). Within those walls are educated, well educated, a certain number of poor, perhaps orphan youths, who may benefit, perhaps confer honour, on society, instead of degrading and oppressing it through the ills and temptations of poverty. I see one of those edifices which experience tells me are seldom permitted to decay,—the palaces of the Barons, and of darker times, are everywhere crumbling into dust, but the palaces of charity and of enlightened liberty endure and flourish. I see the realization of a grand conception,—the union of these two ideas; into this substantial reservoir of benevolence I will direct my little stream; by the mingling of many waters is the noblest river formed. There is nothing personal about this College: the founder is probably gone to his account; but the good work remains. On the one side, I still see an abode where the wicked cease from troubling, and where the weary are at rest; on the other, I still behold a busy, moving scene,—active, joyous spirits, revelling in life's—like Nature's—happiest season, blooming spring. I fancy the belief pretty generally prevails among those who take an interest in the "Fund," that, should it be deprived of Mr. Newnham's services, its continued existence would be doubtful. His exertions have been great indeed, yet a small capital only is collected. The "British Medical Fund" has ceased to be; it died of its philosophy; and, should the "Benevolent Fund" eventually share the same fate, I venture to predict its chief disease will be, its "purely charitable, unostentatious nature." That the boldness of the College plan commands respect and support, is plain. Mr. Newnham speaks of its "ultimate failure;" can he know that, in a few months, a sum of money and a host of friends, sufficient to insure its success, have been obtained,—10,000*l.* is in hand,—sermons have been preached, and are about to be preached, all over the country in its aid,—local committees will, ere long, be established in almost every town,—together securing an amount of co-operation which renders any speculation as to its failure almost ridiculous? So far from the College "attempting too much," it is its grandeur that has brought success. Men feel justly proud in assisting to build a temple of charity worthy of the Christian religion and of the British name.

I am, &c. CHIRURGUS.

THE BALL-AND-SOCKET FRACTURE SWING.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have just read another letter, in your Journal of the 10th inst., from the pen of Mr. Roberts, on the swing apparatus. He has certainly very much misunderstood the extent of the application of the suspension-board of Sauter, improved by M. Mayor, of Lausanne, and further improved by myself; and I query if he ever witnessed its application. M. Mayor used no splint, but secured the limb on the board through two niches, fastening the leg by means of a bandage at the under part of the board, and suspending it by four ropes, their ends meeting at any convenient distance above the limb, and attached to a single line

from the top of the bed or ceiling of the room. The addition I have made has been a groove for the ropes to pass through under the plane of the board, so as to admit of rotation of the leg on its axis from the hip-joint, by continuing the support to the under part of the leg to the thigh, by placing the limb (when viewed on the side) in an obtuse angle, the whole being secured by a strap to the pelvis. I have also contrived a foot-board, which can be placed according to the length of the limb. The treatment adopted by myself in fractures of the leg, after securing the limb in proper splints, is to place it on the apparatus for suspension, and attach it to any point above the bed, which, if rightly adjusted, the patient can not only revolve the injured limb on its axis and lie on either side, but move up or down in any direction the length of the cord may admit; and also, if necessary, the point of attachment can be removed, and the patient be enabled to sit in on a chair, or recline on a sofa. These advantages I have demonstrated to many of my medical friends, who can testify (and some by their personal experience, unfortunately), to the simplicity, safety, and extensive utility of this mode of suspension. There is another great advantage which this apparatus admits, viz., the facility of applying dressings, if needed, as in compound fracture, gun-shot wounds, etc. In my work, "Facts and Observations in Medicine and Surgery," page 17, is a paper abstracted from the *Journal des Connaissances Medico-Chirurgicales*, written by M. Mayor, in a reply to Dr. H. Larrey, setting forth many arguments in favour of this principle and practice of suspending fractured limbs. On Thursday last, being in London, I went to Guy's Hospital to see an old patient in the accident-ward, who was using the apparatus as suggested by Mr. Roberts. I observed that there are the two principles of the ball and socket joint, and suspension; but I cannot refrain from saying, these advantages are so impeded by the frame as to nullify the utility of suspension. In this reply, I would beg the reader to understand, I can have no other motive but that of desiring to enforce the right application of a principle in the treatment of fractures so well calculated to give ease and comfort to a patient.—I am, &c.,

Crayford, Kent. JOHN GRANTHAM, F.R.C.S.

BETHLEM HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

SIR,—Although one cannot fail to regret the position in which the eminent visiting-physicians of Bethlem Hospital have been placed, yet, if the agitation which has ruffled the stagnant state of affairs in that well-endowed Institution should succeed in imparting some wholesome activity, people will not be too curious concerning the means whereby it has been brought about.

The system of entrusting the charge of a lunatic hospital or asylum to non-resident officers must go wrong, however able and zealous those officers may be, because the most important influence for good or evil on the patients, is the behaviour and conduct of the attendants under whose charge they are placed; and this behaviour can only be kept up to the sticking-point of vigilant care, good temper, forbearance, and discretion, by the constant supervision of the master's eye. If there is no master, or if he is mainly an absentee, those servants who have not a kind of conscience vouchsafed to few, will, under reiterated temptation, woefully back-slide from their arduous duties, and harshness and neglect towards the patients will be the natural and inevitable result. It may be objected, that sub-officers are always resident, to whom the authority of the absent master may be delegated; but such borrowed authority is like moonshine,—a pale and feeble reflex of the real power.

The Matron of Bethlem has resigned: if the Governors take the opinion of their new superintendent on the appointment of her successor, they will act wisely. The struggle for authority between the physician and this female rival, by whom a *quasi*-medical position is frequently usurped, has been the fruitful source of mischief in many asylums. In most cases, the matron has the best of it; she is not always "an elderly married woman, sedate and grave," and the gallant courtesy of elderly gentlemen may easily glide into partizanship. The doctor also feels that it is unseemly and extremely disagreeable to contend with a lady, however strong-minded and official she may be, so he submits entirely, or agrees to divide the kingdom, and, in the female wards, to practise only in consultation. In several asylums, including some of the largest, the matron has practically the management and moral treatment of all the female patients; she controls the attendants, directs the classification, amusements, and employments of the patients; and, if it were not for the need of a little medical and pharmaceutical aid, would be very happy to do without the doctor altogether.

When the medical superintendent is a married man, and his wife is willing to accept office, there can be no great objection to the use of the word matron, if the lady prefers it to the more intelligible one of mistress; otherwise, the name and office of asylum matron should be for ever abolished, and the duties be distributed between the superintendent, the housekeeper, and the head nurse.

Under the spur of public opinion, the wards of Bethlem may soon, in many respects, emulate those of the best county asylums; the attendants may become cheerful and alert, the windows may be filled with flowering plants, and the walls be covered with prints and birdcages; climbing plants and turf may clothe the prison-like walls and areas of the airing yards; there may be racquet and fives courts, conservatories, dances, concerts, and lectures; and there may be a general activity of useful employment to render amusements more welcome and beneficial; but the roar of London will still be audible,—the air will still be full of blacks and all manner of disagreeable gases, and the only verdant object beyond the walls will be the people going to confession in the opposite building.

Professor Whewell asserts, that the desire for air and exercise is a natural want of mankind, and one of the most powerful "springs of human action." This is true to the fullest extent of that portion of the human race which inhabits our great cities. To a Londoner, jaded with toil and anxiety, a run into the country is not only a delicious enjoyment, but an invigorating remedy to mind and body. If it is all this to the man whose mental poise is correct, and whose nerves alone are a little deranged, what must it be to the poor Cockney lunatic, distracted with cark and care, sensitively anxious about the meaning, and painfully alive to the influence, of all surrounding objects?

The importance of a pleasing and cheerful situation for a lunatic hospital cannot be over estimated. Not only is such a situation thoroughly appreciated and enjoyed by a great number of patients who retain possession of many faculties of enjoyment; but it has often been observed to have a strange and unexpected effect upon those sunk in the apathy of approaching dementia, or the isolation of melancholia.

The author of "Bleak-house" tells us of a philosophic gentleman who was accustomed to visit Staple's-inn to see how countrified the leaves and sparrows looked, and who satisfied his desire to see the country by talking of the "crystal" brook which once ran down Holborn, and the turnstile which once led to green fields there. The imagination of the inmates of Bethlem can scarcely be directed to produce the like contentment, even should they come to the conclusion that the site of the windmill in St. George's Fields, where Justice Shallow and Sir John Falstaff spent a "merrie" night, was in their own immediate vicinity.

In all seriousness, although Bethlem has been twice rebuilt, its present situation and construction is a very bad one; and, if the Governors have the requisite funds, and I could dispose of the existing place in any satisfactory manner, they would do well to remove the whole concern from under the canopy of London smoke. The present building was erected before the great improvements in the treatment of the insane had been effected, and before the means requisite for carrying them out were understood.

The physicians of the sister hospital of Luke's, say, in their centennial Report, published this year:—"We are glad to chronicle the benevolent feelings of those who, a century ago, laid the foundation of so noble a charity; and, be it remembered, that these same feelings have wrought great changes in our times in the condition and treatment of the poor lunatic. The hospital, no doubt, was built according to the opinions, possibly the prejudices, of those times. Tradition seems to have handed down to our ancestors a monastery as the proper model for a lunatic asylum. The first that was built was at Jerusalem, by the monks of the sixth century; and the long galleries and solitary rooms of Bethlem and St. Luke's seem to point to the corridors and cells of the monastery as their original type; but, however this may be, it is undoubtedly unfortunate that our ancestors had not a better model; and it ill becomes those who possess the advantages of modern improvements, to speak lightly of the efforts of those who were actuated by the same benevolent motives which have effected so much good in meliorating the sad condition of the insane."

This just apology will not, however, excuse those upon whom the present administration of the funds has devolved from applying them according to the light of modern science, and in the footsteps of modern improvement.

That man would be more bold than scrupulous or trustworthy, who would undertake, under the same conditions, to send out a greater number of cured cases than those reported from Bethlem by the present distinguished physicians. It can, however, admit of little doubt, that these gentlemen would

themselves not only have sent out a greater proportion of cures, and that these cures would have been of a more satisfactory nature, had they been able to treat their patients in a well-constructed building, situated at some distance from smoky London, and surrounded by gardens and a farm, affording not only space, interest, and amusement, but the most healthy kind of labour. The satisfactory nature of a cure from insanity depends upon its completeness and permanence, and upon the duration of treatment. The number of relapses which occur in the discharges from Bethlem is not known, and depends perhaps more on the treatment which the patient receives from the world after his discharge than from his condition at that period. The average duration of treatment is of great importance, not only to the individual patient, whose time and sufferings are saved by a speedy cure, but to the public, inasmuch as the economy of any system of treatment depends in a great degree upon its brevity. The benefit to be derived from a certain amount of charitable revenue can thus be extended; it being obvious, that, in an hospital containing 200 curable patients, if the average duration of treatment is three months, the same number of cures will be effected as in another hospital containing 400 patients, where the duration of treatment is six months.

If the Governors of Bethlem are not able to remove that Institution altogether into a more suitable locality, there is a middle course which they would find no difficulty in adopting, without delay and without risk of serious loss.

They can sell a portion of their outlying property, buy a farm in some accessible and pleasant situation in Surrey, and build thereon the beginning of a new hospital, in such a manner that it can be occupied as the country house, or convalescent establishment, to the old one. A short residence in such an offset from the parent stock would give to patients approaching convalescence the last filip wanted to complete recovery. It would also be useful to a great number of those still remaining in the town establishment, by affording to them an object of great interest and of anticipated change of scene and enjoyment. Such an arrangement would give room in Bethlem, and render it possible to close some of the most objectionable wards, or to convert them into store-rooms, or workshops, or anything they may be fitted for.

The great hospital would be supplied from the farm with milk, butter, vegetables, and other agricultural produce, and, under good management, the additional outlay would be found to be well invested, even in a pecuniary point of view. Because the labour would be gratuitous; and it has been found, that the labour of insane patients is amply remunerative when employed in gardening and spade husbandry. In handicrafts, such labour is not always remunerative, on account of the greater cost of supervision, and the occasional spoiling of material. In gardening and husbandry the employment is simple and easily directed; it is also much liked by the majority of men, and is, therefore, willingly and cheerfully undertaken. Of course the financial question is very secondary to the sanitary one, and the patients must always be led to employ themselves for their own benefit and improvement, not compelled to do so for the advantage of the Institution.

Apologising for the length of this communication, and trusting that some real and permanent good may arise out of the present turmoil at Bethlem, I am, &c.

A County Superintendent.

CHLOROFORM IN SCOTLAND.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the last number of the *Medical Times and Gazette* Dr. Snow asks me to state the cases of death from chloroform which have occurred in Scotland.

He mentions two cases, both at or near Glasgow, one under the operation of extracting a toe-nail, the other while sounding for stone. I do not know any particulars whatever as to the former case. The common current account of the latter is given in the last number of the *Monthly Medical Journal*, page 554, under some observations on chloroform, to which I beg to refer your correspondent.

In addition to these two cases, I have heard only of one more instance of a fatal result from the employment of chloroform in surgery, and that also near Glasgow. In this instance, chloroform was given by the practitioner for tooth extraction; but, I am sorry to add, none of the parties present were at the time in a condition to give any very satisfactory evidence.

These are the only cases, as far as I know, of death in Scotland from chloroform, among the many thousand cases in which it has now been exhibited in connexion with surgical proceedings; and I believe, that if any others had occurred, I would have been certain to have heard of them.

Before chloroform was introduced, sulphuric ether was reported to have produced the death of one patient in Scotland, who had amputation of the thigh performed, in consequence of a severe railway injury.

One of the surgeons, however, afterwards assured me, that in the dark hovel in which the operation was performed, it was found impossible to secure the vessels sufficiently quickly with the ligatures to prevent the collapsed patient dying from hæmorrhage after the leg was removed; but the ether was a better apology than the hæmorrhage for the man's sudden sinking.

I know of one medical patient who died south of the Tweed, when using, or shortly after using, chloroform, to procure sleep in *delirium tremens*. But, as Dr. Snow is well aware, death often enough occurs suddenly in that disease; and the last thing done is always apt to be blamed for the result. A medical friend of mine had, some time ago, a patient suffering under *delirium tremens*. Opiates, etc., had all failed to produce quietude, or induce sleep. At last, the practitioner, who was watching by his patient, went home to his own house, which was in the immediate neighbourhood, to obtain some chloroform for the purpose of using it as a hypnotic. During the few minutes of his absence in search of the chloroform-bottle, his patient died.

A somewhat similar coincidence happened at the very first introduction of chloroform here. After discovering the anæsthetic effects of chloroform, I was, of course, anxious to get it tried in a surgical operation. The first surgical cases in which it was used, were operated upon in the Royal Infirmary here, on 15th November, 1847. Two days previously, an operation took place in the Infirmary, at which I could not be present, to test the power of chloroform; and, so far, fortunately so; for the man was operated upon for hernia, without any anæsthetic, and suddenly died after the first incision was made through the skin, and with the operation uncompleted. I know of another case in Edinburgh where death instantaneously followed the use of an abscess-lancet without chloroform,—the practitioner, in fact, deeming the case too slight to require any anæsthetic.

While, since the anæsthetic effects of chloroform were known, we have thus had two patients dying in Edinburgh on the operating-table, who did not use chloroform, we have had no death under the same circumstances in the vast number who have now taken chloroform here for surgical operations and other purposes.

Some time ago, I was informed of an instance in which a practitioner urged a patient to use chloroform for the purpose of removing a tooth that had worn her out with pain. She postponed it for a few hours; and, in the meantime, went to bed to procure, if possible, some rest. On going to her room an hour or two subsequently, she was found dead. In this, as in other similar instances, the reputation of chloroform had a narrow escape.

In the different discussions that have taken place, in this country and on the Continent, regarding chloroform as the supposed cause of death in various surgical patients, it appears to me, that it has very generally been forgotten, that patients have ever and anon died during, or immediately after, operations, long before the time of the use of any anæsthetics. But, when such cases occur now, and anæsthetics do happen to be employed in them, the latter are always naturally, though perhaps not always justly blamed. I have already alluded to two such cases that have happened in Edinburgh since the time chloroform was known here; and doubtlessly, if chloroform had been employed in these cases, it would have been taxed with the fatal result. Shortly before the first of these cases, my friend Dr. Robertson had shaved the groin of a patient, and was about to proceed to perform the operation for hernia, when the patient fainted and died, before any incision was made. I have been told of various cases by other surgeons, where the patient died on the operating-table before the days of ether and chloroform, and where the result now would be considered by many as the palpable and indisputable effect of any anæsthetic the patient might chance to use.

In making this remark, I do not, of course, by any means wish to argue, that chloroform may not, and has not proved fatal when used in surgical operations. Nothing could be further from my thoughts or intentions. In the very first paper which I published on the subject, in the *Monthly Medical Journal*, I attempted to warn my professional brethren, that too great or too long a dose "would doubtless produce serious consequences and even death;" and at the same time I ventured to hope, that "its great potency would be one great safeguard against its abuse."

The druggists of Edinburgh have sold, I believe, during the last four or five years, as much chloroform to the medical practitioners and to the public of this city, as would produce anæsthesia in one or two hundred thousand separate instances; and, indeed,

most of the practitioners here use it daily for diagnostic and other purposes, surgical, obstetrical, and medical.

I am sure you will doubt with me, whether an equal amount of full doses of antimony, or of opium, or even of Epsom salts, would not have been followed by a greater number of deaths, occurring perhaps more slowly, but, probably, also more surely. And, on the contrary, this agent, while (like all other medicinal agents), proving injurious now and again in a rare exceptional case, has, I rejoice to think, been already the means of saving, during the last few years, a vast amount of human suffering, and by that means no small amount also of human life.

I am not aware of any death in Scotland or elsewhere from the use of chloroform in midwifery, out of the many thousand cases in which it has now been employed in the old and new world. Nor, indeed, does the obstetric patient run anything like the risk of the surgical patient; for, in midwifery, though the anæsthetic is required to be given for a far longer period, it does not require to be given so deeply as in surgery.

Since November, 1847, I have only attended twelve cases of labour in which chloroform was not used during delivery. In all my other cases I have employed it; and none of those patients, I venture to say, who have used it, would again choose to suffer the unnecessary pains attendant upon labour without it. Most of my obstetric brethren employ it as frequently as I do. After once beginning its use at an obstetric case, I generally leave its exhibition to be continued by the nurse, or by any intelligent friend of the patient who may be in the room. Some of our midwives use it in the cases which they themselves attend. Two weeks ago, one of them told me that she had now employed it herself in her own practice in above fifty cases, with nothing but the happiest results, and without meeting with any circumstances to give her the slightest feeling of uneasiness in its employment.

Chloroform is manufactured to a large extent by three or four chemical establishments in Edinburgh; and as its high price in England has been, I believe, one great cause of its slow introduction into general practice among you, let me state, that with us it is usually sold wholesale to apothecaries at six or seven shillings per pound weight; and it is retailed to medical men at eightpence, and to the general public at one shilling the ounce per weight. It ought to be as cheap in the South.

I am not aware that in Scotland, where chloroform is employed so very extensively and so very successfully by medical men and others, it is ever exhibited by any one except on a handkerchief, towel, or the like; no kind of formal apparatus is used. Doubtlessly, one principal point consists in diluting its vapour sufficiently freely with air, and this can always be readily accomplished when a handkerchief is employed. Some American and English practitioners have proposed to render the vapour of chloroform less strong by diluting it when used with the vapour of sulphuric ether, or of alcohol (as in the so-called chloric ether). But alcohol, etc., often leave headache and excitement, which chloroform does not. And it is surely a thousand-fold better to dilute it with the vapour of "common atmospheric air," than with any other diluting medium.

Perhaps I should add, that twice or thrice chloroform has been used in Scotland by medical men and others to commit suicide; but, of course, Dr. Snow's inquiry does not extend to these cases of its deliberate abuse. He alludes to one of these cases, in which a druggist at Aberdeen destroyed himself by "breathing chloroform for amusement when no one was present;" and he proceeds to speak of a fatal accident "from this proceeding" as a "matter of course." I am not aware of any other similar case in Scotland.

I am, &c. J. Y. Simpson.

Edinburgh.

ON MEDICAL REFORM.

[To the Editor of the Medical Times and Gazette.]

Sir,—Any person debating or writing upon such a theme as medical reform, should, I think, always begin at the beginning, and not with the consideration of the medical corporations and their monopolies—the wrong end. In the first place, then, we wil defer the latter subject, and, instead, just consider what is essentially necessary for the education of all medical men, and then look at the narrow-minded institutions afterwards.

What would be more in accordance with progressive improvement than any system at present in operation? Let us see how many subjects the students ought to study, and the order in which he should proceed: when he is master of them (?) he can easily add others for his own gratification, though not essential:—

First Matriculation.

English, Latin, and Greek composition, at least translate one page from a standard English (medical) author, into good grammatical Latin; a test one hundred times better than translating a Latin author into English.

Natural philosophy.

Elements of mathematics, etc.

Afterwards to be placed on the register as a medical student.

The student's practical studies are three, of which he cannot have too much; viz.—

1st. Anatomical dissections, at least three courses.

2nd. Chemical manipulations ought to have ditto.

3rd. Hospital practice three years.

Clinical Lectures—

1. Clinical medical clerk, six months' pharmacy.
2. Surgical dresser ,,
3. Midwifery assistant ,,

The following courses of lectures, extended over four or five years:—

1. Anatomy and Physiology	3 courses of	6	months
1. Materia Medica and Dietetics	2	,,	6	,,
2. Chemistry and Medical Jurisprudence..	2	,,	6	,,
2. Botany and Comparative Anatomy	2	,,	3	,,
3. Medicine, Surgery, and Midwifery	2	,,	6	,,

With weekly class-examinations in each.

After each session let the student be required to go up and pass an examination, increasing in severity as he advances in his studies, from freshman to senior, previous to the great practical examination granting the degree. If the student be idle, he never will advance in his gradations; if diligent, he will arrive at the long-sought-for goal of his ambition in about five years from the matriculation. It would also have the effect of none being admitted into the Profession but those who were really competent.

In all the present medical institutions, "the blow" (it is more that than anything else) comes all at once, at the end; and when the student is approaching it—his entrance, or may be, final exit—he is quite a tyro; because he has had no preparatory experience as to what it is, and the imagination, ever worse than the reality, he naturally fears. At present the examinations end also, as regards the subject, where they should begin—with the classics.

After the above arrangement, students would not fear any examination, because all the "little goes" would harden them, and they become familiar with the proceedings as they advance; and I have no hesitation in saying, that they would face a ten times tougher examination with unconcern than any at present in existence, not excepting even the University of London.

After a student has obtained the degree, let him follow the bent of his inclination, and practise any branch he may think proper; for he may begin to practise generally, and afterwards cultivate one branch in particular; and when he has been in practice some fifteen or twenty years, he may become a consulting practitioner in the branch in which he is the most celebrated, and sought after accordingly.

The student's whole time is engaged in his own preparation for after life, therefore the apprenticeship-system ought to be abolished; and, if medical men have so much practice, that they cannot get through it themselves, they ought to obtain a qualified assistant, whose thorough knowledge of his Profession renders him fully competent to undertake the necessary duties; and he ought, moreover, to be paid liberally. We have now seen what would be sufficient for all medical men, so, in the next place, we will cursorily look at what we have.

It is true, that we have not undergone such repeated stringent tests as the above scheme proposes; but, at the same time, is there one among us who has not gone through all of the above subjects more or less, and had to deviate according to circumstances afterwards, in order to obtain a title from some one or more of the institutions in existence?

We had to track out our course accordingly; and because the medical institutions of this country are behind the age, is it any fault of ours individually? If a medical practitioner wishes to immigrate to another part of the United Kingdom—say England, is he to undergone an examination again at such a place, for instance, as the Apothecaries' Hall, to be legally qualified; or, if he refuses to do so, is he an ignorant pretender? It requires no refutation.

Science on all sides is leaving our "corporate bodies" sadly in the rear. Each capital of the Empire is now reached in about eight hours or less: and yet we have three different Pharmacopœias established by authority, varying in strength, dangerous in the extreme.

The following are the chief corporate interests to contend with in any reform movement, and they are formidable:—

The Colleges of Physicians of London, Edinburgh, and Dublin 3

The Colleges of Surgeons of London, Edinburgh, and Dublin	3
The Universities—Oxford, Cambridge, London, Dublin, Edinburgh, Glasgow, St. Andrews, and Aberdeen ..	8
The Faculty of Physicians and Surgeons, Glasgow; Apothecaries'-hall, London; and Dublin	3
Principal interests ..	17
Army Medical Board, Navy „ „, East India „, Ordnance. } Supplemental Examinations.	

As there has been a great deal of late written concerning the apothecaries, we will just define the word literally, and then look to its former and present signification.

Apothecary (from *ἀποθήκη*, a repository, from *ἀποτίθημι*, to deposit or lay aside), a store-house for medicines, an apothecary's shop. One who practises pharmacy, one who prepares drugs for medicinal purposes, and keeps them for sale. Formerly, the apothecary merely compounded and dispensed the prescriptions of the physician and surgeon. The term is now, however, also applied in England to those who practise in medicine and *at the same time deal in drugs;* everywhere else they are mere druggists. So much, then, for the apotheeary. Let the term become obsolete, and medical practitioners adhere strictly to their *profession*, and leave the *trade* to *Pharmaceutical Chemists* (*φαρμακευτικὸς*, from *φαρμακεύω*, to use medicines) or *Phamaciens* (*φάρμακον*, a medicine)—the word *Chemist, per se*, inappropriate, as we have only about twenty in the United Kingdom, also the term *Druggist*, as it means an extensive trader—*their sole business being to dispense, not to prescribe medicines*, and preparing medicines according to authority, as in France. A registered apprenticeship requisite, and a penalty for any person commencing without his indentures, or a slight examination, and a penalty likewise, for visiting or prescribing. In country places or districts where there are no *pharmaciens* established, medical practitioners to be allowed to *dispense* until established.

Those colleges that are not requisite, let them afterwards exist as such, minus the power of granting degrees, and act similarly, as in the case of the "Copyright Amendment Act," passed in 1836, when the compulsory delivery of books to the national libraries, supplied by authors and publishers in this obnoxious manner, was reduced from eleven to six, and substitute a money-grant to the others from the Treasury, if it be required. There are, and ought to be, in every large town, Medical Societies, and the present Colleges, as far as bricks and mortar are concerned, would come in very well for the purpose. It is not them we swear to uphold the honour and dignity of, but our noble Profession of itself in general, and our own conduct in particular.

We must be prepared on all sides to make concessions, or we never can meliorate our unsettled and anomalous condition. All interests, then, must yield a little to obtain the desired boon.

Each and every one in the Profession, at the date of any change, must remain *in statu quo*, in one sense, although enrolled under one great head, as no law can be retrospective when the present is a nullity; therefore, we must each enjoy equal rights and privileges, although nominally divided,—become amalgamated into one great brotherhood. Our endeavours must be to agree; individual eminence will always lead the van, whatever the caste. Chartered institutions will not do that for us; so the great need not begrudge what they might consider an encroachment, as each one, after all, will find his own proper level, be he what he may The reality of any change will be for our children, not the present generation.

Then let there be established a Medical Faculty for each kingdom, on the representative principle, for those resident, each sending delegates to form a supreme Senate,—the governing body of the whole Profession in the empire,—to regulate the by-laws and penalties. Every person holding a diploma from any of the present chartered medical institutions to be admitted a member of the Faculty of the kingdom in which he is located.

Now, we must be liberal, or we can never be anything but a set of loggerheads; once join issue on a broad basis, and the Legislature will be too happy to do everything in their power for us. Remember, the inconvenience, if any, will be with ourselves, not the public; even if there should be, it will only be of short duration, and then this mighty discord will be settled for the future. Then, with renewed vigour, and internal peace of mind with ourselves and brethren, we daily meet in our great and good calling,—our sole end and aim being the alleviation of suffering humanity, and goodwill towards all. I am, &c. A SURGEON.

Liverpool.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

JOHN BISHOP, Esq., F.R.S., President, in the Chair.

SMALL-POX AFTER VACCINATION.

Mr. Dendy exhibited a sketch taken from the arm of Sarah Palmer, now in the Small-pox Hospital, who was vaccinated forty-six years ago, when she was a month old, by Dr. Jenner, at Cheltenham, the evidences of which process are four very perfect cicatrices, two on each arm. A short time since, she was with a little boy, who was covered with small-pox. Nine days afterwards, she felt indisposed, and had fever for about five days, when papulæ appeared. The eruption of variola not general over the body; in parts semi-confluent. The disease is mitigated rather than modified, having precisely the same linear character as true variola. She has been, however, free from secondary fever, diarrhœa, hæmorrhage, ptyalism, and delirium, which may probably be attributed, considering the extent and rise of the pustules, to the so far successful vaccination. The eruption was completely different from that which Mr. Dendy terms variella, and which has been (he said) so unwisely called vario*loid*. *A fortiori*, then, this case should be an argument in favour of vaccination, although, *primâ facie*, it might have been deemed against it, judging from the *mere* eruption. Mr. Dendy again referred to the importance of terms and definitions, objecting especially to the adoption of the adjunct *oid*, first applied by Dr. J. Thompson to all pocks, whether capable or not of propagation, and to the *jumbling*, by Rayer, of all spurious or anomalous pocks, as varicella, which produces nothing by insertion.

BONY TUMOUR OF THE UTERUS.

Dr. Crisp exhibited a bony tumour connected with the uterus, which weighed twenty-two ounces; it occupied nearly the entire cavity of the pelvis, was of a globular form, and of so dense a structure, that there was some difficulty in making a section of it. The patient from whom it was taken was 75 years of age, and the chief inconvenience she experienced was a difficulty in retaining her urine.

ULCERATION OF THE APPENDIX VERMIFORMIS, AND OBSTRUCTION OF THE BOWELS.

Dr. Crisp showed a specimen of ulceration of the appendix vermiformis, in which two mortar-like concretions obstructed this cavity, and occasioned the ulceration. The patient had constipated bowels for five days, and died of peritonitis.

A paper from the pen of Dr. Bauer, of Berlin, was read by the Secretary,

ON SPINAL CURVATURE OR SCOLIOSIS.

After alluding to the disadvantages to which this branch of surgical science had been exposed, having been chiefly left in the hands of empirics and quacks, the author proceeded to speak of the various methods of cure proposed, or in fashion at various periods. Some referred scoliosis to disease of the bones of the vertebræ, others of the intervertebral substance; others, again, to a deficient, increased, or perverted action of the muscular system. Thus Strohmeyer attributed it to paralysis of the muscles connected with respiration; Guerin and Major to active retraction of the dorsal muscles, which they believed to exist in all cases requiring section of these muscles. Dieffenbach thought this muscular tension was only occasional, yet sometimes requiring section. But even here observers did not agree; some believing the contraction to be in the convex, others in the concave side. Another opinion was, that the disease was almost wholly constitutional, requiring no local treatment; next, mechanical stretching, treatment locally, was substituted. Delpech soon, however, gave good reasons for abandoning this treatment; but, believing the muscular system to be retarded in its growth, he recommended a gymnastic treatment, afterwards improved upon by Link, the Swede, and known as "kinesitherapie," etc., etc. Dr. Büehring, in Germany, at least, had disproved these contradictory opinions. The objections to Guerin's views were fourfold. 1st. Scholiosis is always produced after certain fixed laws. 2nd. The curvature is not the effect, but the cause, of the muscular contraction. 3rd. Contractions of the large dorsal muscles, *i. e.*, sacro-lumbalis and longissimus dorsi, could never give rise to a sigmoid curvature, but to simple lateral curvature, as in pleurosthotonos. 4th. The negative results of Guerin's mode of treatment disprove his theory. Dr Büehring remarked, first, that new-born children and the fœtus had their spines perfectly straight. Later in life, the spine became curved, and remained normally so, the column inclining to the right side of the median line in the

dorsal, and to the left in the lumbar region. Dr. Büchring accounted for it thus: The head was heavy in the erect position, and necessarily gave the spine a tendency to bend somewhere. 2nd. There was an unequal weight in the viscera on each side of it. The heart was less heavy than the liver; a difference in weight rendered still greater by the active muscular contractions of the heart. 3rd. The distribution of the blood through the left subclavian, was, by reason of its passing off at a right angle from the arch of the aorta, less free than that through the right subclavian; necessarily the muscular structures of the right upper extremity were more developed and heavier than on the left side. Referring to statistics, Dr. Büchring had established, that the proportion where the curvature was not on the right side was 1 per cent.. The returns of the Orthopædic Hospital gave it as 25 per cent. Dr. Bauer, however, insisted upon the accuracy of Dr. Büchring's results, as they were made by a mathematical instrument, which he described, and which left no room for doubt. Dr. Büchring distinguishes four forms of scoliosis: 1st. A curve of tension of three lines, while the plummet line falls on the left side of the rima nature, to form almost a right angle with the horizontal projection. 2nd. Where the plummet line falls to the right side of the rima. The tension of the curves is much increased; the scapulæ have altered their position; left hip projects; but the structural organic changes in the spine have not occurred, and the spine may be artificially straightened for a time. 3rd. These changes are greatly more manifest; the ligaments are firm and the vertebræ rigid. 4th. The changes have reached their maximum; spine is greatly curved; ribs and scapulæ are displaced; the bodies of vertebræ are twisted from right to left. Dr. Bauer next surveyed the different methods of cure adopted by different observers in Germany, and concluded by directing especial attention to Dr. Büchring's mode of treatment. Dr. Büchring acknowledged the accuracy of most of Guerin's and Major's views, excepting in so far as relates to the necessity for myotomy. Looking to the causes of the disease, as before noted, the natural deviation of the column, he regards scoliosis as a state of physical debility, requiring constitutional strengthening measures, and at the same time removes many of the causes of disease by obliging the patients to adopt the recumbent posture. Lateral pressure on the convex surfaces is also conjoined. In some cases, from long persistence of the disease, there is more or less rigidity of the muscles. He does not, for this reason, perform myotomy, but recommends preparatory inunctions with hot oil, but especially with chloroform, which is a very efficient relaxing agent in these cases. The lateral pressure at first is kept up only for a day or two, then removed. After a time, however, it can be borne continuously. Dr. Bauer concluded by extolling this mode of treatment as having been, in all cases susceptible of cure, most successful, and now universally adopted in Germany.

Mr. I. B. Brown read a paper

ON A NEW MODE OF OPERATING FOR OVARIAN DROPSY,

consisting of the excision of a portion of the cyst, returning the remaining portion into the peritonæal cavity, and closing the wound by sutures, thus allowing any fresh fluid secreted by the remaining portion of the cyst to escape into the cavity of the abdomen, there to be taken up by absorption, and discharged by the kidneys. Mr. Brown said this method of treatment was suggested to his mind by reflecting upon the numerous cases on record, in which a spontaneous cure has occurred by an accidental rupture of the cyst, followed by a copious discharge of urine. This mode was not considered applicable to every case, nor was it the purpose of the author to lay down any absolute rules for its use, but simply to relate such facts as had come under his observation.

Case 1.—This case had been alluded to on a former occasion, and Mr. Brown now read the notes of the case as they were taken by Mr. Bullock at St. Mary's Hospital, where the operation was performed. The woman, aged 47, was subject to prolapsus uteri, which Mr. Brown considered as presenting a sufficient objection to treating the case by pressure. The swelling first appeared rather on the left side, about nineteen years ago, but had increased rapidly during the last six months. The following was her condition on admission to St. Mary's Hospital, February 13, 1852:—Abdomen considerably enlarged, with shooting pains extending to the shoulders. Complete procidentia uteri, returned with difficulty. Percussion dull in front, resonant at the sides, less so on the left than the right; fluctuation very distinct, the integuments moving freely over the tumour. Feb. 14th.—Ordinary diet; porter, one pint; blue-pill, three grains; compound aloetic pill, four grains, every night, with saline diuretics. March 6th.—General health good; some fluid drawn from the cyst with a small trocar quite clear, with only a trace of albumen and some chlorides. 10th.—She was placed under the influence of chloroform, and an incision was made through the integuments, down to the linea alba, from an inch and a half below the umbilicus, extending four inches. The linea alba was then divided, afterwards the transversalis fascia, and finally the peritonæum; the cyst then presented to view, and was found to be free from adhesions. It was seized with a pair of forceps, a large trocar was introduced, drawing off about sixteen pints of fluid, leaving some fluid in the cyst, and then a piece of the cyst, which appeared comparatively free from blood-vessels, was excised. The external wound was closed by interrupted sutures, the ligatures including all the abdominal parietes except the peritonæum. She was ordered two grains of opium immediately, and one grain every three hours. A pad of wet lint was placed over the wound, and a broad bandage round the abdomen. Severe peritonitis ensued for the first five or six days, which was subdued completely by large and repeated bleedings from the arm, with calomel and opium. In eight days the abdominal tenderness had subsided, the abdomen became flaccid, and the urine passed exceeded in quantity the fluid swallowed. By the 21st (eleven days after the operation), the remains of the cyst could be felt on the right side of the cicatrix, as a solid substance of an irregular form. On the 3rd of April, no increase of the abdomen could be discovered, and on the 6th she was discharged. Mr. Brown said he expected that the kidneys would continue to secrete more fluid than was drunk for some time, and that the cyst would ultimately become of an indurated, perhaps calcareous character, possessing less vitality, and incapable of secreting fluid. He should feel himself bound to report to the Society any return of the disease, although he did not anticipate a relapse.

Case 2.—In this case, which had been treated nine years ago by tapping, pressure, mercurials, and diuretics, so far successfully that no return of fluid took place for seven years, the abdomen had been gradually enlarging for the last two years, and the patient was anxious for a radical cure, and sanguine as to the result of the operation of excision of a portion of the cyst. She was previously prepared for the operation by a farinaceous and milk diet, avoiding stimulants, and keeping the bowels well open daily, under which treatment the size of the abdomen was materially reduced. The operation was performed on March 29, 1852, in a manner similar to that related in Case 1. Nine pints of clear fluid were withdrawn, and a portion of the cyst excised. But it unfortunately happened that the peritonæal coat of the cyst was very vascular, and hæmorrhage ensued, which was not to be subdued by torsion of the vessels. As there were no adhesions, it was determined to remove the whole cyst. A double ligature having been tightly applied over the pedicle, which was attached to the left ovary, about an inch and a half broad, and containing one large blood-vessel, the pedicle was divided, the cyst removed, sutures applied, and over them a many-tailed bandage. The case did very well, no signs of inflammation having occurred; the ligature came away in four weeks, and on the day following the patient was in her drawing-room, convalescent. This case was related, as illustrating an important difficulty which might occur, rendering the removal of the whole cyst a safer practice than tying several bleeding vessels, and leaving the ligatures within the peritonæum, a source of much danger.

Case 3.—In this case the operation was performed in a similar manner to that detailed in Case 1. A portion of the cyst was excised, but a second large cyst was found, the fluid of which was evacuated, and the wound closed. An attack of inflammation ensued, which was successfully combated by bleeding, and calomel, and opium, and the patient did well. The first cyst became collapsed, and could be easily felt beneath the walls of the abdomen; but the second cyst has frequently filled since; and now, sixteen months after the operation, it fills at a much slower rate, and the patient's health is much improved. Steady and firm pressure has been had recourse to after each tapping, to which Mr. Brown attributes mainly the slower filling of the cyst. This case was related to show another complication which might occur.

Mr. Brown concluded by expressing a hope, that this operation may prove to be another successful method of treating this very troublesome disease.

EPIDEMIOLOGICAL SOCIETY.

At the ordinary meeting of the Society, held at the house of the Royal Medical and Chirurgical Society, 53, Berners-street, on Monday, June 7, 1852, Dr. Babington, the President, in the chair, two very excellent and interesting papers were read, on the important subject of small-pox and vaccination in India.

The first paper

ON THE INTRODUCTION INTO AND PROGRESS OF VACCINATION IN BENGAL.

By Da. C. FINCH, late of H.E.I.C.S., and Presidency Surgeon, Calcutta.

was read by that gentleman, of which we give an abstract. This

paper is an epitome of the history of the introduction and progress of vaccination into Bengal, compiled principally from the reports successively published by the Superintendents-General of Vaccination in Bengal,—Messrs. Shoolbred, Cameron, and Stewart. The periods intervening between the dates of publication comprise so many epochs in the history of this very interesting subject, beginning with the first notice, nearly half a century ago, in 1804, by Dr. Shoolbred, to the year 1829, the date of Mr. Cameron's Report, to that of 1843-44, when Dr. D. Stewart, the present Superintendent-General of Vaccination, presented his first Report to the Government of Bengal. A late and second Report, published by Dr. Stewart, has furnished the author of the paper with materials for adding a supplement, which brings down the account of vaccination in Bengal to the year 1850. The history of vaccination in Bengal furnishes reasons rather for painful commentary than for hearty congratulation, on the introduction to our eastern possessions of the greatest boon which science has yet conferred on mankind, and for deep regret that a boon above all prices should have been virtually rejected by our Indian fellow-subjects, through ignorance and prejudice. Vaccination may be said to have been virtually rejected by the inhabitants of Bengal as a community, notwithstanding the desire and endeavours of the present rulers of India to introduce this inestimable blessing into the countries subject to their rule, placing it within every man's reach, notwithstanding the unwearied zeal and exertions of their medical officers to carry out the purpose of their directors, and notwithstanding the advantages of accepting it being so obvious, and the dangers incident to rejecting it so appalling. Half a century has nearly elapsed since its first introduction, and still we hear of severe and fatal visitations of epidemic small-pox, causing as much havoc in Calcutta as it does in any unprotected population or community. It does not appear that the natives of Bengal could have had any disinclination to adopt inoculation, which seems to have been practised from time immemorial, though the worship of the goddess Situla, who specially presides over small-pox, is general in Bengal; and some of her devotees are so bigoted that they refuse the protection of inoculation until one of their families fall a victim to variola, when they imagine the divinity is propitiated by the sacrifice. Inoculation seems the universal practice throughout Bengal and the provinces subordinate to it, and is one of the chief obstacles to the reception of vaccination. Dr. Finch mentions several obstacles to the successful introduction of vaccination in India; among them, the chief are—1. The dislike of the Hindoos to any innovation. 2. Their apathy or indifference to distant danger. 3. The practice of inoculation for small-pox. 4. Climate; which for one-half of the year is unfavourable to vaccination. 5. Want of confidence in its protective powers,—this last objection being of latest origin and of most obstinate tendency. A retrospective view of the introduction of vaccination does not offer any very immediate prospect of its general adoption by the natives of Bengal.

The second paper read was written by H. J. Stewart, Esq., Assistant-surgeon Bombay residence.

The reading of both papers occupied the time allowed for holding the meeting.

MEDICAL NEWS.

University of Oxford.—The Fielding Herbarium, presented by Mr. Fielding, of Lancaster, together with a choice collection of works on botany, has been accepted by the University authorities, who have set apart a sum of 2000*l.*, the interest of which is to be applied to the maintaining and adding to the collection. The curators are to be the Professor of Botany and the Regius Professor of Medicine; and a third, to be appointed by the other two, from among the members of the University. A further sum of 1250*l.* is set apart for providing a suitable building in the Botanic Garden for the reception of the collection. Dr. Daubeny, the Professor of Botany, speaks in the highest terms of the value of this collection, as does also, it appears, Sir W. Hooker.

University of Glasgow.—We understand, that Mr. Secretary Walpole has appointed Dr. John Macfarlane to the vacant Professorship of Medicine in the University of Glasgow.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 11th inst.:—

Austen, Josiah, Plymouth.
Church, George, Listowell, Kerry.
Clarke, John Andrew, Army.
Coombs, Savill James, South Lambeth.
Kelly, James Douglas, Liverpool.
Lankester, Henry, Poole, Dorset.
Martin, James, Quebec, Canada.
Mason, George, Deal.
Morris, George Selwyn, Wye, Ashford, Kent.
Murphy, John Barry, Cork.
Smith, John, Daventry.
Streatfield, John Tremlyn, Wanstead, Essex.
Wild, Thomas, Ramsbottom, Lancashire.

The Fellowship.—The Council of the Royal College of Surgeons have just announced that the next examination for this distinction will be held in the first week of the ensuing month, for examinations in classics, mathematics, and French. The professional examinations for the senior candidates will take place in August next.

New Councillors.—The Fellows of the Royal College of Surgeons have received summons to attend a meeting of their order in the hall of the College on Thursday, the 8th day of July next, at one o'clock in the afternoon, for the election of four Fellows into the Council of the College, in the room of three members going out in rotation, and of John Dalrymple, Esq., deceased. From the bye-laws of the College, sent to each Fellow of the Institution, it appears, that a notice of the intention of any gentleman to present himself as a candidate for a seat in the Council must be sent in within ten days from the publication of the advertisement in the *London Gazette*. This bye-law does not appear to have been generally understood, as only a very few (we understand four or five) have complied with it. The members of the Council now resigning their seats are Messrs. Bransby Cooper, Coulson, and Stafford; the two first-named gentlemen there can be no doubt will be re-elected. Mr. Stafford having resigned, there remain two vacancies to fill up; this will be done from the gentlemen who have offered themselves, viz., Messrs. Gulliver, Tatum, Shaw, and Partridge,—all good men, and deserving of the object of their ambition, and from whom the "Fellows" will have a difficult task to select.

Collegiate Appointments.—The Profession will no doubt hail with great satisfaction an act of distinguished consideration on the part of the Council of the Royal College of Surgeons towards one of their officers, to whom we, in common with the Profession generally, are so much indebted,—we allude to Mr. John Thomas Quekett, the Resident Conservator, who, at a meeting of the Council yesterday, was unanimously elected their Professor of Histology. At the same meeting, Mr. John Henry Sylvester, of Cheltenham, and formerly of King's College, was appointed student in Human and Comparative Anatomy, after a severe competition, in the vacancy occasioned by the retirement of Mr. D. H. Monckton.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 10, 1852:—

Cockburn, James Balfour, Gurnsey.
Damant, Thomas William, Fakenham, Norfolk.
Foquett, Henry Richard, Newcastle Emlyn, Cardigan.
Hawkins, Benjamin Lawrence, as an Assistant.
Hewer, John Henry, Chobham, Surrey.
Hooper, Joseph, Milton-terrace, Wandsworth-road.
Lock, Ezekiel John, Barton, Norfolk.
Jones, William Price, Bala, North Wales.
Rolph, James, London.

Military Appointments.—6th Dragoon Guards: Surgeon George Taylor, from the 81st Foot, to be Surgeon, vice John Heriot, M.D., who retires upon half-pay. 29th Foot: Acting Assistant-Surgeon John Smith Chartres, to be Assistant-Surgeon, vice Stewart, promoted in the 94th Foot. 40th Foot: Acting Assistant-Surgeon William Tidmas, to be Assistant-Surgeon. 81st Foot: Staff-Surgeon of the second class Adam Thomas Jackson, M.D., to be Surgeon vice Taylor, appointed to the 6th Dragoon Guards. 94th Foot: Assistant-Surgeon Ludovick Charles Stewart, from the 29th Foot, to be Surgeon, vice Thompson, deceased. Hospital-staff: Assistant Staff-Surgeon William Rutherford, to be Staff-Surgeon of the second class, vice Jackson, appointed to the 81st Foot; Acting Assistant Surgeon Edward Walker Skues, M.D., to be Assistant-Surgeon of the Forces, vice Booth, promoted in the 73rd Foot. Acting Assistant Surgeon Arthur Edmund Jacob, to be Assistant-Surgeon to the Forces, vice Rutherford, promoted on the Staff.

Naval Appointments.—Surgeons Edward H. Cree, M.D.

(1843), to the Spartan; William R. Dalton (1846), to the Vestal, 26, at Sheerness. Surgeon-Superintendent William H. B. Jones, M.D. (1837), to the Boscawen, 70, at Chatham, vice Gunn; John Dunlop, M.D. (1833), to the Sampson, vice Donnelly; Samuel Donnelly (1842), from the Sampson steam frigate, to the Lady Montague, hired ship. Assistant-Surgeons F. C. Sibbald, M.D. (1846), to the Spartan; Alfred Jackson (1847), to the Vestal; Robert Irvine (1848), to the Cumberland, 70, flagship, on the North American and West Indian station; G. F. A. Drew (1851), confirmed to the Inflexible; James Sproule (1851), confirmed to the Scorpion.

NAVAL APPOINTMENTS AND PROMOTIONS.—Assistant-Surgeon Robert Beith, M.D. (1841), serving at Greenwich Hospital, to be Surgeon.

MR. HENRY S. GAYE was last week appointed House-Surgeon to the Taunton Hospital.

LIEBIG.—Letters from Munich, of the 8th, state, that Professor Liebig has at length yielded to the inducements held out to him by the Bavarian Government to leave Giessen, and settle at the University of Munich. He is to commence his labours there with the winter session.

SCARLET FEVER.—A sad announcement appeared in the *Times* on Monday last, to the effect, that a magistrate, residing on Addison-terrace, Notting-hill, aged 35, his wife, aged 28, and their child, aged 3 years, with the wife's youngest sister, had all died in one week, of malignant scarlet fever.

THE following votes in behalf of science and medical charities have passed the House of Commons. 2006*l.* for the salaries and allowances to certain Professors at the Universities of Oxford and Cambridge; 3957*l.* for the University of London; 7560*l.* for the grants to the Scottish Universities; 300*l.* for the Royal Irish Academy; 1710*l.* for the Queen's University in Ireland; 21,350*l.* for new buildings for the British Museum, and 52,243*l.* for the salaries and expenses of that Museum, besides 2266*l.* for antiquities; 14,920*l.* for the Museum of Practical Geology; 4018*l.* for scientific works and experiments; and 2000*l.* for the expenses of the National Vaccine Establishment.

QUACKERY.—Several correspondents have directed our attention to the advertisements of a member of the Royal College of Surgeons practising in the county of Buckingham, as illustrative of the grossest quackery. One in particular in the *Cambridge Independent Press*, addressed to the students of the University, is very bad. But we have great pleasure in informing our friends, that the Council of the Royal College of Surgeons have the case before them, and are taking measures to purge the College of such characters, who have sworn to uphold the honour, dignity, and welfare of the Profession.

DEATHS *in the Metropolis for the week ending Saturday, June* 12, 1852.

CAUSES OF DEATH.	JUNE 12. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	435	296	167	898	8720
SPECIFIED CAUSES	432	295	166	893	8680
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	158	39	12	209	1859
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	3	18	23	44	452
3. Tubercular Diseases	66	110	5	181	1578
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	50	34	26	110	1072
5. Diseases of the Heart and Blood-vessels	5	19	11	35	296
6. Diseases of the Lungs and of the other Organs of Respiration ...	55	30	25	110	1026
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	25	17	14	56	544
8. Diseases of the Kidneys, &c. ...	2	6	1	9	104
9. Childbirth, Diseases of the Uterus ...	...	7	...	7	96
10. Rheumatism, Diseases of the Bones, Joints, &c.	2	6	1	9	66
11. Diseases of the Skin, Cellular Tissue, &c.	2	...	1	3	9
12. Malformations	3	...	...	3	28
13. Premature Birth and Debility ...	23	...	...	23	239
14. Atrophy	23	...	...	23	153
15. Age	...	...	41	41	425
16. Sudden	2	3	1	6	106
17. Violence, Privation, Cold, and Intemperance	13	6	5	24	327
CAUSES NOT SPECIFIED	3	1	1	5	40

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—My attention has been called to a paragraph in the "Medical Times and Gazette" of the 29th ultimo, in which it was stated, that I "had received orders from Dr. Andrew Smith to hold myself in readiness to proceed to Chatham, preparatory to my entering the Army as Assistant-Surgeon." I beg to say, that your informant has been misled, and that I have merely received intimation from the Head of the Army Medical Department that my name has been placed on the list of candidates for a commission.

I am, &c.

16, Trinity College, Dublin. SAMUEL GIBSON, M.B.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your report of the presentation of the Rainey Testimonial at this Hospital, I observe one or two errors of omission, which it is due to Mr. Rainey not to pass over unnoticed.

Though essentially a students' testimonial, nearly the whole of our medical and surgical staff were subscribers, having sent in their subscriptions to the Committee unsolicited, and thus paid a high compliment to our talented Demonstrator. Not only was the microscope complete, but it was fitted with every convenience, and all the most approved apparatus for correct microscopic observation, their value being very little short of one hundred pounds.

It is by our School being superintended by such men as Mr. Rainey which elevates it so high in the estimation of the Profession.

I am, &c.

St. Thomas's Hospital. A MEMBER OF COMMITTEE.

Scotus has not authenticated his letter; it is, moreover, an advertisement.

We shall be obliged to *Amicus* to obtain the reports to which he alludes, and shall be glad to see him any Tuesday, Wednesday, or Thursday, between 12 and 2, on the subject.

J. J.—We will endeavour to answer the question.

Erratum.—By an inadvertency in our last, the papers of Mr. Barlow were announced as concluded. Such is not the case. They will be continued at once.

[To the Editor of the Medical Times and Gazette.]

SIR,—I most cordially agree with the sentiments expressed in your last by a Graduate of a British University, and sincerely hope the authorities of the Hall will see the justice and expediency of admitting those gentlemen in actual practice who are already licensed by legally constituted medical boards of the United Kingdom. All measures of proposed medical legislation have recognised their claims as general practitioners. The Hall would lose no reputation by enrolling among its licentiates, and extending its protection to, a well qualified class of men, who would, I feel sure, gladly avail themselves of such a privilege. I am, &c.

AN OLD SUBSCRIBER AND ANOTHER BRITISH GRADUATE.

Caritas, Harrogate.—We do not think it becoming the dignity of a surgeon to advertise himself week after week in the columns of a newspaper, side by side with tailors and house agents; nor do we think it much mends his case to say, that he only notifies to the world, that he has removed from one house to another.

Mr. J. J., Islington.—An editor, attacked *as* editor, has no ill-feeling towards his adversary. We think an apology was due to us, and accept it in the spirit in which it is made. Our columns for this week, at least, are full.

H. F. H, Hertfordshire, is thanked for the MS. and newspaper.

Chirurgicus.—We saw the nonsense in the Journal mentioned. Really such trash is beneath notice. London surgeons can afford to smile at it. *They*, at least, can attribute it to its true cause; *they*, at least, could place a finger on the sore spot.

A Student and Subscriber.—We presume so; but a letter to Mr. Belfour will elicit the fact.

A. E. J.—Apply to the Emigration Board.

THE Correspondence relating to the Manchester Medico-Ethical Association reached us too late for our present Number.

COMMUNICATIONS have been received from—

SCOTUS; M.; Mr. RUSSELL REYNOLDS, of Leeds; Dr. HIGGINS, of Birkenhead; Mr. WHITBY, of Ottery, St. Mary; Dr. MARLOW, of H.M. 28th Regiment, Sunderland; Dr. BIRD, of Hyde-park-square; Mr. N. WARD, of the London Hospital, and Broad-street-buildings; Dr. TUANDULL, of Liverpool; Mr. GRANTHAM, of Crayford, Kent; Mr. LUDLOW, of Paternoster-row; Mr. CLOSE, of Manchester; Dr. WALSHE, of University College, and Queen Anne-street; Dr. SIMPSON, of Edinburgh; Dr. BURROWS, of St. Bartholomew's Hospital, and Cavendish-square: Dr. KIRKES, of St. Bartholomew's Hospital; AMICUS; J. J.; CHIRURGUS; Mr. MASON, of Holloway; A. E. J.; Mr. HOWE, of Newtown; A COUNTRY SURGEON; A STUDENT AND SUBSCRIBER; KAPPA; Dr. GREGORY, of the Small-pox Hospital, and Camden-square; ZETA; CARITAS; H. F. H.

ALLSOPP'S PALE OR BITTER ALE.

In consequence of the reported adulteration of Bitter Beer, Messrs. Samuel ALLSOPP and SONS have received numerous incidental TESTIMONIALS to the excellence, purity, and salutary effects of their ALES. They consider it due to the Medical Profession who have so long recommended ALLSOPP'S PALE ALE in all cases where dietetic regimen is required, to give publicity to these Testimonials, as a means of disabusing the public mind of any possible prejudice on the subject.

By the following extracts among a number from the most eminent Medical Men, the Profession throughout the country will have the satisfaction of finding their just appreciation of the remedial advantages of ALLSOPP'S PALE ALE amply confirmed by the concurring testimony of the most able Physicians and Surgeons, as well as the most illustrious Chemists of the time :—

FROM BARON **LIEBIG.**

"The specimens of your PALE ALE sent to me have afforded me another opportunity of confirming its valuable qualities. I am myself an admirer of this beverage, and my own experience enables me to recommend it, in accordance with the opinion of the most eminent English physicians, as a very agreeable and efficient tonic, and as a general beverage both for the invalid and the robust.——" Giessen, May 6."

FROM PROFESSOR **GRAHAM,** F.R.S., UNIVERSITY COLLEGE, LONDON; AND PROFESSOR **HOFMANN,** Ph.D., F.R.S., COLLEGE OF CHEMISTRY, LONDON.

"The sifting nature of the chemical examination which the Beers of Messrs. ALLSOPP's manufacture for many months past have been subjected to, fully establishes their incontestable purity. The process of brewing PALE ALE is one in which nothing but Water and the best Malt and Hops of the first quality are used: it is an operation of the greatest delicacy and care, which would be entirely ruined by any tampering with the materials employed. ——" London, April 26."

FROM THE **ANALYTICAL SANITARY COMMISSIONER** OF THE "LANCET," MAY 15, 1852.

"From the pure and wholesome nature of the ingredients employed, the moderate proportion of alcohol present, and the very considerable quantity of aromatic anodyne bitter derived from hops contained in these Beers, they tend to preserve the tone and vigour of the stomach, and conduce to the restoration of the health of that organ when in a state of weakness or debility. They resemble, indeed, from their lightness, a *wine of malt*, rather than an ordinary fermented infusion; and it is very satisfactory to find, that a beverage of such general consumption is entirely free from every kind of impurity.

FROM SIR **CHARLES M. CLARKE,** BART., PHYSICIAN TO HER LATE MAJESTY THE QUEEN DOWAGER.

"I have frequently recommended BITTER ALE medicinally, and when my home-brewed Ale has been exhausted, I have been supplied with Ale 'from your brewery.'——" Wigginton Lodge, May 2."

FROM **THOMAS WATSON,** M.D.

"In the genuineness and salubrity of PALE ALE and BITTER BEER, as manufactured at Burton, my confidence remains unshaken." ——" Henrietta-street, Cavendish-square, May 5."

FROM **GEORGE BUDD,** M.D., SENIOR PHYSICIAN OF KING'S COLLEGE HOSPITAL.

"I did not want any testimony to satisfy me of the perfect purity of the PALE ALE manufactured by you. A close observation of its effects upon myself and upon many others to whom I have prescribed it long ago, convinced me, as much as the most searching chemical analysis could do, that it contains nothing more than malt and hops, and that it is a first-rate beverage.——" Dover-street, May 1."

FROM **MARSHALL HALL,** M.D., F.R.S.

"My confidence in the purity of your PALE ALE remains unshaken, and my opinion of its great value in a dietetic and remedial point of view, is entirely confirmed by long time and experience.——" Grosvenor-street, April 30."

FROM **BENJAMIN TRAVERS,** ESQ., F.R.S.

"I do not hesitate to affirm, that no deleterious substance is employed in ALLSOPP'S PALE ALE and BITTER BEER, and that my confidence in its wholesomeness as a beverage remains unshaken.——" Green-street, April 30."

ALLSOPP'S PALE OR BITTER ALE

May be obtained in Casks of all sizes from the BREWERY, BURTON-ON-TRENT; and from the undermentioned BRANCH ESTABLISHMENTS :—

LONDON, at 61, KING WILLIAM-STREET, CITY;
LIVERPOOL, at COOK-STREET;
MANCHESTER, at DUCIE-PLACE;
DUDLEY, at the ROYAL BREWERY;
GLASGOW, at 115, ST. VINCENT-STREET;
DUBLIN, at ULSTER-CHAMBERS, DAME-STREET;
BIRMINGHAM, at MARKET-HALL;

At either of which places a list of respectable parties who supply the Beer in Bottles, (and also in Casks at the same prices as from the Brewery,) may at any time be seen.

WATER ONLY REQUIRED!

Moore and Buckley's Patent Concentrated Milk.

"Supplies fresh milk at all times."—Times, September 16th, 1850.—— "It was almost, (if not quite) equal in flavour and quality to milk fresh from the cow."—Captain H. T. Austins, Commander of the Arctic Expedition, H.M.S. Resolute, October 1st, 1851.——"The milk is most admirable. None should go to sea without it."—Captain Ommaney, H.M.S. Assistance, Arctic Expedition, October 25th, 1851.——"The greatest comfort and blessing we had on board our ships in the Arctic Expedition."—Medical Officer's Report to the Lords of the Admiralty, November, 1851.

Preserved in Hermetically Sealed Tins, each tin producing seven times the quantity of new milk.

Moore and Buckley's COCOA AND MILK, and CHOCOLATE AND MILK, are combinations of the Concentrated Milk with the finest Trinidad Cocoa and the choicest French Chocolate, in hermetically sealed tins. These delicious preparations are wholly free from the admixtures so common in the packet Cocoas, and, considering their quality, are equally inexpensive; for example, a BREAKFAST-CUP OF PURE COCOA, COMBINED WITH MILK AND SUGAR, can be had at the cost of a Penny, by merely adding boiling water. The PRIZE MEDAL at the GREAT EXHIBITION was awarded to these preparations for their Novelty, Utility, and Economy; and they were constantly used in the Refreshment-rooms of the Exhibition, giving universal satisfaction.

Moore and Buckley's INFANTS' FOOD is a combination of the Concentrated Milk with pure Farina, and will be found a light and nourishing diet for INVALIDS as well as INFANTS, requiring only boiling water for its instant preparation. The whole of these preparations are under the immediate inspection of Mr. Moore, the Patentee, who was for many years the ordinary medical attendant in London of the Royal Family.

The FINEST FRENCH CHOCOLATES in every variety, made expressly for the subscribers by one of the first Paris manufacturers. These Chocolates, it may be observed, are really French, and are greatly superior to those commonly sold as French, but which are in fact, generally speaking, of English manufacture.

MOORE and BUCKLEY, Ranton Abbey Farm and Works, Staffordshire; and 4, Upper East Smithfield, London; and sold Retail by most of the respectable Grocers and Druggists in Town and Country.

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ORIGINAL COMMUNICATIONS.

VACCINATION TESTED BY THE EXPERIENCE OF HALF A CENTURY.(a)

By GEORGE GREGORY, M.D.,
Physician to the Small-Pox Hospital.

The practice of variolous inoculation, first heard of at Constantinople, about the year 1700, and promulgated in England in 1721, did not become general in this country until about the year 1750. It was in 1746 that some benevolent individuals founded the Small-pox and Inoculation Hospital. The success of that early measure of sanitary improvement induced the Royal College of Physicians of London, in 1754, to put forward a strong recommendation in favour of inoculation; but it is worthy of note, that one-third of a century elapsed from the first announcement of Lady Mary Wortley Montague's spirited inroad on the routine of medical practice, before the College of Physicians gave to that measure the stamp of professional authority.

From the year 1748 to 1798, variolous inoculation continued to progress in the good opinion of the public throughout this country. In France, however, it never met with any large amount of Royal, public, or professional encouragement. De La Condamine laboured, indeed, to open the eyes of his countrymen to the merits of inoculation, but to so little purpose, that, in 1763, during the prevalence of a variolous epidemic, the enemies of inoculation prevailed on Louis XV. and his complacent Parliament to prohibit that beneficial practice within the walls of Paris.

The inoculation of small-pox was performed with a double object,—first, to banish from the mind all anxiety as to the taking of small-pox in more advanced life, by giving it at once; and, secondly, to insure a mild form of the disease, free, at least, from secondary fever. In fulfilling these objects, inoculation was eminently and undeniably successful. All subsequent anxiety was effectually banished, and the distinct form of small-pox was so universally secured by it, that the deaths by inoculated small-pox, under skilful professional management, did not exceed four, or at furthest five in a thousand.

Variolous inoculation, however, undoubtedly had its disadvantages. To be of any real service, it was essential to practice it in early life, before the character of the infant's constitution could be known. It happened, therefore, but too often, that inoculation lighted up the dormant embers of scrofula, and thus laid the foundation of evils scarcely less deplorable than the unrestrained ravages of small-pox.

From 1748 to 1798, the physicians and surgeons of this country studied inoculation diligently; but it was not until the latter epoch, when the practice had been tested by the experience of half a century, that the merits and demerits of the measure were fully understood.

In 1798, Jenner published his first Treatise on Vaccine Inoculation. The advantages of the new practice were at once loudly and confidently proclaimed. In July, 1799, ere the sheets which first announced the brilliant discovery were well dry, thirty-three of the most eminent physicians, and forty of the most distinguished surgeons of the Metropolis, including the honoured names of Halford, Baillie, Clive, Cooper, and Abernethy, had signed a document, purporting, "that those persons who have had the cow-pox are perfectly secure from the future infection of the small-pox."(b)

(a) Read before the Medical and Chirurgical Society of London, March 9, 1852.
(b) See Baron's Life of Jenner, Vol. I., p. 354.

The claims put forward by Jenner, in favour of vaccination, in his first Treatise (April 1798) were singularly modest, and such as may now well command our unqualified approval; but on the 17th March, 1802, he announced to the House of Commons, and to the British public, first, that "vaccination is attended with the singularly beneficial effect of rendering, through life, the person so inoculated perfectly secure from the infection of small-pox;" and, secondly, that "vaccination had already checked the progress of the small-pox, and, from its nature, must finally annihilate that dreadful disorder."(a)

When we look around us,—when we observe the quantity of small-pox, now (at the close of the first half century from the promulgation of vaccination) diffused through this and other countries,—when we see the practice of re-vaccination almost universal on the Continent of Europe, and greatly increasing in this country, we are led irresistibly to the conclusion, that these broadly urged claims in favour of vaccination have not been substantiated. Small-pox does invade the vaccinated, and the extirpation of that direful disorder is an event as distant now as when it was first heedlessly (and, in my humble judgment, most presumptuously) anticipated by Jenner.

As in the case of variolous inoculation, so in the case of vaccine inoculation, half a century must elapse before the merits and the shortcomings of the measure can be justly appreciated. 1852 has come, and with it the completion of half a century since Jenner petitioned Parliament for national remuneration. On the present occasion, I propose to test vaccination as Sir Gilbert Blane, in the Fourth and Tenth Volumes of the "Transactions" of this Society, formerly tested inoculation, and to offer the results of a dispassionate investigation.

In the outset of the inquiry, it behoves me to fix what I understand by vaccination, whether something prophylactic of small-pox, or something identical with small-pox. Cow-pox is a disease *sui generis*, so essentially and specifically distinct from small-pox, that it cannot be said with any truth, that he who has undergone vaccination has undergone small-pox in a mild form. The well-known experiments of Ceely prove undeniably that a certain relationship subsists between cow-pox and small-pox; but it must always be borne in mind, that though the variolous miasm, by passing through the body of the cow, is transformed into cow-pox, cow-pox has never, in its turn, been converted into small-pox. Cow-pox and small-pox are, at all times and in all countries, clearly and readily distinguishable. The ordinary source of cow-pox is not that virus obtainable by artificial means, but it is, as Jenner truly stated in his Petition to the House of Commons(b), "a disease which occasionally exists, in a particular form, among cattle."

A clear understanding of this question becomes essential, when it is attempted to institute a comparison between the results of inoculation and vaccination,—an attempt which is now made by every writer on the subject.

The object of inoculation was to give the disease of small-pox, not to prevent it. The object of vaccination is to prevent small-pox, not to give it. To compare recurring small-pox, therefore, with small-pox after vaccination, is to compare things, not merely different from each other, but opposed in their spirit and scope. When a person inoculated in childhood contracts small-pox in adult life, he undergoes small-pox for the second time; but, when a person vaccinated in infancy takes small-pox in adult life, he takes it for the first time. Every such person is, no doubt, liable to a second attack of genuine small-pox. Whether this contingency, however, is to be dreaded, the following observations will tend to show.

(a) See Baron's Life of Jenner, Vol. I., p. 490.
(b) Ibid., p. 491.

It has been the fate of recurrent or secondary small-pox to be, for the last 100 years, the battle-field on which the abettors of inoculation, the enemies of inoculation, and the uncompromising supporters of vaccination, have taken their stand. To encourage the practice of inoculation, De La Condamine declared, that not one person in 10,000 ever took small-pox a second time. To rebut this argument, the enemies and lukewarm supporters of inoculation collected cases of secondary small-pox (especially of small-pox after alleged inoculation) from all quarters, gave credence to every idle tale that was told them, and to an eager desire of victory sacrificed all considerations of scientific accuracy. The case of Louis XV. was put prominently forward. That renowned monarch was stated to have undergone small-pox in 1724, when 14 years of age, and to have died of a second attack, fifty years afterwards. Modern historians (having no favourite doctrine to support) have ruined this celebrated case. The King's disease, in 1721, was a sharp, though brief, attack of fever. Louis XV. is known to have lived afterwards in constant dread of small-pox. In 1752, when his son, the Dauphin, took small-pox, the King refused to go near him. This monarch's distrust of inoculation was fearfully chastised by his own death, under the most aggravated attack of confluent and gangrenous small-pox, on the evening of the 10th of May, 1774, being the eleventh day of fever, and the thirteenth of eruption.

To explain, or palliate, the alleged imperfections of vaccination, modern writers almost universally enlarge on the frequency of recurrent small-pox; and this is done by those high medical authorities to whom Parliament assigns the superintendence of vaccination in this country.(a) Some further remarks on the subject are, therefore, demanded.

It is well worthy of record, that the Transactions of this Society, which now extend through a period of forty-seven years, present only one solitary case of recurrent small-pox, —that of Francis Bird, recorded by Dr. Bateman.(b) This case carries with it every reasonable proof of accuracy; but a second instance, imperfectly noticed in the same paper, has no claim whatever on our confidence. The peculiar characters of small-pox, during its advance and decline, are said to preclude all ambiguity as to the true character of the disorder; but the experience of the Small-pox Hospital does not bear out the assertion. Persons are continually brought to that hospital with certificates from medical men, that they labour under small-pox, while the disease proves to be lichen, urticaria, varicella, or ecthyma. The pits and scars, too, so strongly insisted on by some as unequivocal evidences of antecedent variola, cannot always be relied on, as the case of Thomas Davis, narrated by Dr. Hennen,(c) in the *Edinburgh Medical and Surgical Journal*, clearly establishes.

The same volume which records that striking case, contains a long list of authors who have detailed instances of secondary small-pox. Very many of these cases I have carefully inquired into. A large number prove to be mere repetitions, (one author copying from another). Some are so obviously apocryphal, that no credit can be placed in them. While perusing the most trustworthy of these cases, I was forcibly struck by the fact, that they bear no resemblance whatever to the cases of small-pox after vaccination now so common. Some of the attacks were milder than the alleged primary seizure, some severer, many fatal; but the peculiarity of modification, so characteristic of post-vaccine small-pox, is never, even incidentally, alluded to.

In estimating the degree of credit due to the cases of recurrent small-pox recorded by the authors of the last century, let it not be forgotten, that the variolæ veræ, and pusillæ were not accurately distinguished until 1767; and that the identity of these diseases (which Heberden then laboured so diligently to disprove) was revived, as a pathological doctrine, by Dr. Thomson, of Edinburgh, in 1819.

While such important differences of opinion exist, it is obviously essential, that the details of both attacks should be carefully given. These, however, are scarcely ever forthcoming; nor do I remember to have read one authentic case where the same medical man witnessed both the primary and the secondary seizure. It would be absurd to argue against the possibility of such an occurrence. I have, myself, known a few unequivocal instances; but I am, at the same time, thoroughly convinced, that the recurrence of small-pox is among the most rare events which the annals of medicine furnish.

These views I would now contrast with the occurrence of small-pox after vaccination, premising that, in my judgment, the two events are traceable to different causes, and have no pathological bearing upon each other whatever. Small-pox occurring after vaccination should be investigated simply with the view of determining under what circumstances the sequence takes place, to what extent it takes place, and in what degree of intensity.

The records of the Small-pox Hospital, during the last eleven years, (that is, since the prohibition of inoculation,) throw much light on these subjects. Appended to this paper are Tables, giving minute statistical details of the movements in the hospital during that period, and specially in the years 1850 and 1851, of which the following may be taken as a summary:—

During the last eleven years, 4091 persons have been admitted into the hospital having small-pox, of whom 2167 had been vaccinated, and 1924 were unvaccinated; that is to say, considerably more than one-half of all the cases admitted had been subjected to vaccination in early life. By far the larger proportion of this section of patients were of adult age. A few were between the ages of 9 and 15; but below the age of 9, scarcely any vaccinated person, having small-pox, was admitted. This could not be accident, for numerous cases of unvaccinated children, under 9, were admitted. I am, therefore, driven to the conclusion, that the susceptibility of the variolous miasm, among vaccinated persons, increases as life advances, the reverse of what happens in the unvaccinated portion of mankind, where the susceptibility of small-pox is greatest in infancy.

In the two years 1850 and 1851, the total number admitted (having small-pox) was 976, of whom 162 died, being at the rate of 16 per cent. In this number were comprised 11 infants below the age of 5 (all unprotected), of whom 22 (or more than one-half) died. 161 were children between the ages of 5 and 15 (the greater portion unvaccinated), of whom 25 died. 685 were adults from 15 years of age to 30. 109 exceeded the age of 30. The larger proportion of these 791 adults had been vaccinated; of them there died 115, or 14 per cent.

Of the total number admitted (976), 613 professed to have been vaccinated in early life, and of them 569 exhibited cicatrices more or less distinct. Of this latter section (the vaccinated with cognizable scars), there died 25, being in the ratio of 4 per cent. Seven persons professed to have undergone small-pox at some former period, but the corroborative evidence was deficient.

The proportion of persons admitted after vaccination to the total admissions, amounted in 1851 to 65 per cent. It was only 44 per cent. in 1811. The increase is obviously attributable to the more extensive diffusion of vaccination. Whether the proportion of vaccinated subjects taking small-pox in adult life to those who remain unaffected has, or has not, yet attained its maximum, I am not prepared to say, nor can I venture to express the existing ratio in figures. Every one must form his own judgment on this matter, by observing what has happened among his own relatives, friends, neighbours, and acquaintances. That the proportion is infinitely beyond anything which had been anticipated forty, or twenty, or even ten years ago, is, I conceive, undeniable.

With regard to the intensity of the disease when so occurring, we have means of arriving at much greater accuracy of detail. The mortality at the Small-pox Hospital during the last two years, among the well-vaccinated section, has only slightly exceeded 4 per cent., though it must be acknowledged, that many suffered most severely, (especially in the early periods of the disorder,) and though secondary fever, with its sequelæ, was not unfrequent. Those who refer so triumphantly to the bills of mortality, as evidences of the value of vaccination, should remember the essential differences between quantity and intensity.

With such varied data before us, what estimate can we form of the real merits of vaccination? and what measures can be suggested, having for their object an increase of public security against the ravages of small-pox?

The experience of half a century abundantly demonstrates, that small-pox, though it has been largely and most beneficially (and may be still further) controlled, will always

(a) See Report of National Vaccine Board for 1851.
(b) Medico-Chirurgical Transactions, Vol. II., p. 31.
(c) See *Edinburgh Medical and Surgical Journal* for October, 1818. Vol. XIV., p. 461.

abide among us; and that the notion of extirpating it was absurd and chimerical. The same amount of experience teaches, that the absolute mortality by small-pox throughout Europe has been, through the agency of vaccination, diminished to a most astonishing extent. But, while freely admitting this, and acknowledging the immense benefits which have accrued to mankind from the splendid discovery of Jenner, we are constrained, at the same time, to admit, that vaccination fails in that great object which inoculation so effectually attained,—establishing in the mind a feeling of security.

A large number of the vaccinated portion of mankind, especially in the higher classes, live now in constant dread of small-pox. They fly from it on the first notice of its being in the neighbourhood, and could by no effort be persuaded to visit the wards of the small-pox hospital. Others, again, are satisfied with that limited amount of protection which vaccination really affords,—are content to know, that their children, if succumbing to small-pox in adult life, will, in all probability, have it lightly; and are no further anxious to escape small-pox than they are to escape, as far as may be, measles and scarlet fever. To minds so constituted (and many such I know), vaccination appears in its true and just colours,—a beneficent provision of Nature, not for the extermination, but for the mitigation of small-pox—admirably adapted, by its mildness, for the infantile constitution, and specially fitted for that early period of life, when the susceptibility of casual small-pox is most energetic. The warmest friends and admirers of Jenner may surely rest contented with such brilliant results as these, proved as they are by the concurrent voice of mankind, and sanctioned as they are by the "experience of half a century."

But such laurels are insufficient for certain ultra-supporters of vaccine power. Not content with the high position which their favourite measure has justly attained, they speak and write in the most disparaging terms of variolous inoculation, —they cry down and brand as an enemy of the human race every man who claims for it its fair share of merit. They load it with obloquy, as being the means by which small-pox is kept up and disseminated throughout this and other countries. Against such unjust accusations, I shall never cease to raise my voice; and I proceed shortly to state, on what grounds I base my opposition to these extreme views, and to this desertion of a useful and once popular measure.

Inoculation was abolished throughout England and Ireland by Act of Parliament, in 1840. The Act has been rigidly obeyed in every part of the country, excepting, perhaps, the more distant regions of Connaught. Nevertheless, small-pox is just as prevalent now as before the Act of 1840 was passed. The prohibitory clause of that Act has not affected, in any the smallest degree, the quantity of small-pox,—a circumstance, the explanation of which is obvious enough to those who will banish prejudice and reason with candour.

The Act which prohibited inoculation did not render vaccination compulsory. Numbers, therefore, remain, as the pabulum whereon small-pox may prey. Every child taking small-pox casually, becomes the focus of contagion, more dangerous than the same child would have proved, if inoculated, in the exact proportion that casual small-pox exceeds inoculated small-pox in severity. A mild case of inoculated small-pox, (which dries up and scabs on the seventh or eighth day,) is innocuous, when compared with a confluent case, which pours forth a virulent secretion for three weeks. One such case does infinitely more mischief in a densely populated neighbourhood than ten or twenty cases of a mild inoculated small-pox. For all purposes of public security in the Metropolis, it is far better that 100 children should be inoculated, than that twenty should remain unvaccinated, the easy and certain prey of confluent casual variola. This view of the question appears to have altogether escaped the notice both of our legislators and our pathologists. If, therefore, the Legislature cannot or will not enforce vaccination, it is better that the restriction on inoculation should be in some measure removed. No real improvement can ever take place in this country, with reference to small-pox and its antidote, until the present anomalous state of the law is altered.

When inoculation was abolished, parents should have been compelled to give to their unconscious offspring the benefits of vaccination at that period of life when those benefits are most unequivocally manifested. To permit such children to imbibe the germs of small-pox in its most malignant form, and thus to disseminate it, yet withhold from them the great boon of inoculation, was a great error, of which we are now reaping the bitter fruits.

That matters cannot long continue in their present unsatisfactory state, must, I apprehend, be universally conceded. Sooner or later Parliament must reconsider the Act of 1840, and either simply make vaccination compulsory, or couple with it a repeal or modification of the clause prohibiting inoculation. I do not venture to anticipate the decision of the Legislature on a question of such national importance; but I am firmly persuaded, that the unqualified prohibition of inoculation was ill-judged, and that Parliament would have acted more wisely in placing that practice under restriction, than in abolishing it altogether. Such restrictions might be more or less stringent. Inoculation would, as a matter of course, be practised exclusively by medical men. Its adoption by others would, doubtless, remain, as at present, punishable by fine and imprisonment. The exposure of all persons labouring under small-pox, and their removal in any other vehicles save those licensed for that special service, would, I trust, be made equally misdemeanours.

But the restrictions on inoculation might, if Parliament thought fit, be extended much further than this. It might be strictly prohibited to inoculate children under five years of age. Inoculation might be permitted only to persons of mature age, capable of judging for themselves. It might be conceded only in the case of persons who had previously undergone vaccination. It might be allowed only in houses licensed for that especial object. No one can reasonably object to judicious restrictions on a practice which was once grossly abused; but it is one thing to root up a tree, and another to lop off defective branches. Should the Legislature permit a qualified and restricted inoculation, I have no doubt that the larger portion of our population would remain satisfied with the mild and safe process of vaccination, while some would prefer that measure which, occasioning a greater amount of immediate, yet diminishes, or, rather, abolishes, all prospective anxiety. The judgment of the medical Profession would, in every such case, be necessarily appealed to. Educated as the present race of medical practitioners are, and acting, as they would act, under the supervision of a discerning Press, both public and professional, I feel assured that they would exercise that judgment with due care and circumspection, and that the result would tend greatly to the benefit of the country.

No. I.

Table exhibiting the Movements at the Small-pox Hospital for 11 Years (1841 to 1851 inclusive), and showing the gradual increase in the Numbers admitted after Vaccination. (*)

YEARS.	Admissions.					(*)	Deaths.					Rate of Mortality.
	Total of Persons having Small-pox.	Persons not alleging any Protection.	Persons alleging prior Small-pox.	Alleging Vaccination, but showing no Scars.	Persons alleging Vaccination, and showing Cicatrices.	Proportion per Cent. of Admissions after good Vaccination to Total Admissions.	Among the Unprotected.	Among those alleging prior Small-pox.	After Vaccination without Scars.	After Vaccination with Cognizable Scars.	Total Deaths.	
	—	A.	B.	C.	D.	Per Cent.	A.	B.	C.	D.	—	Per Cent.
1841...	342	189	2	0	151	44	63	1	0	10	74	21
1842...	141	78	1	0	62	44	30	0	0	4	34	24
1843...	149	78	2	0	69	46	27	0	0	0	27	18
1844...	643	328	3	0	312	50	127	0	0	24	151	23
1845...	367	147	3	0	217	60	66	0	0	13	79	21
1846...	147	57	2	11	77	52	22	0	2	5	29	20
1847...	450	164	8	43	230	51	50	2	12	17	81	18
1848...	686	254	4	63	365	53	103	2	25	88	168	24
1849...	190	71	4	0	115	60	22	0	0	11	33	18
1850...	306	129	1	22	154	50	42	0	8	8	58	19
1851...	670	227	6	22	415	65	77	1	9	17	104	15
Total.	4,091	1,722	36	166	2,167	...	629	6	56	147	838	22
Total.	4,091		1,924		2,167	...		691		147	838	22

No. II.

Table exhibiting the Admissions and Mortality at the Small-pox Hospital of London, during the Years 1850-51, *with reference to Age and Antecedents.*

Class.	Mortality among	Mortality in 1850-51. Under 5 Years.	Between 5 and 15.	Between 15 and 30.	Above 30 Years.	Total Mortality.	Total Admissions.	Rate of Mortality.
								PerCt.
1	Persons Unprotected	22	20	56	21	119	356	33
2	Persons Vaccinated, but without Scars	0	2	12	3	17	44	26
3	Persons Vaccinated, and showing Scars	0	3	15	7	25	569	4
4	Persons alleging prior Small-pox	0	0	0	1	1	7	...
	Total having Small-pox	22	25	83	32	162	976	16
5	Persons not having Small-pox	0	0	0	0	0	20	...
	Total Mortality	22	25	83	32	162	...	...
	Total Admissions	41	161	685	109	162	996	...
	Rate of Mortality	50 pr. Ct.	15½	11½	30	16	...	16

THE MECHANISM OF BRONCHOPHONY.

By W. H. WALSHE, M.D.,

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[Concluded from page 462.]

§ I. To return for a moment to the question of the relative conducting powers of healthy and hepatised lung. Skoda, it will be remembered, (*Vide ante*, P. 460, col. 2,) assumes that the alleged temporary disappearance of bronchophony over hepatised tissue depends on passing obstruction of the tubes with fluid secretion. Now, here, he conceives, is an argument against Laennec's doctrine of increased conducting power in hepatisation; for "were such increase of power real, it would be a matter of indifference, whether air or fluid were contained in the bronchial tubes." But, observe the constitution of this argument. Skoda assumes the presence of a certain *doubtful* condition, (namely, a change in the relationship of air and fluid in the tubes of the hepatised tissue) in order to explain what is itself another *doubtful* condition (namely, sudden disappearance and reappearance of bronchophony;) and then bases an argument against Laennec, on a combination of the two assumptions. But, taking the proposition on its own merits, what force has it? Is it true that, on the doctrine of increased conducting power, it makes no difference, whether one portion of the series of conducting media be fluid or air? Obviously the *onus* of proving the fact, if it be a fact, rests with Skoda; meanwhile, we are justified in believing, that such partial variation on the composition of the conducting materials does exercise a certain influence on the general result.

Again: Let us suppose a case of hepatization of a tolerably thick stratum of the *posterior* part of a lung; bronchophony is heard, in such a case, at the posterior, not at the anterior, surface of the chest. Now, as, according to Skoda himself, reinforcement of voice would, under the circumstances, take place about the central tubes, how comes it, if his notion of the superiority of healthy over solidified tissue (as a conducting material) be constantly correct, that bronchophony is not heard in front over healthy texture, instead of being, as it is, audible in the back, over the hepatised parts?

§ II. There is a well-known principle, differing both from consonance and echo, in virtue of which sounds are increased in intensity, namely, the *unison-resonance of cavities*. This principle is brought into action in a variety of instruments; all those of the violin kind, the piano-forte, etc. *Every note* produced from the sounding material of such instruments is reinforced by the mass of air enclosed within them, — not alone *certain notes and their harmonics*, as where consonance is the reinforcing principle in action. Now, there can be little doubt that, in the natural condition of the chest, this principle of *unison-resonance* comes into play. But it is totally unavailable in the explanation of the bronchophony of hepatization, for the simple reason, that such *unison-resonance* is perfect exactly in proportion to the *amount of air contained in the resounding space*. Imagine the box of the violin filled with any solid or fluid material, and what comes of its property of reinforcing sound?(a)

Had this principle any influence in the generation of the bronchophony of pneumonia, its effect would obviously be to transfer the phenomenon to the healthy side of the chest, in cases where the solidification was limited to one lung.

§ III. I have within the last few days observed a fact of considerable interest in its bearings on the general question of reinforcement of sound within the thorax. In a case of well-marked chronic consolidation of the apex of the right lung, *the second sound of the heart* (this organ, the arch of the aorta, and the pulmonary artery being, as far as ascertainable from signs and symptoms, perfectly healthy) *was decidedly louder under the right clavicle than at the mid-sternal base*. No such reinforcement existed at the sternal notch, nor under the left clavicle; the mediastinum and left apex were, judging from the percussion-note, free from solid matter. Here, then, was a case where the second sound was louder at about three inches' distance from its point of production than at that point itself; the pitch of the sound in the two places was identically the same. Was the reinforcement produced on the principle of echo, consonance, or unison-resonance? Certainly not on the last, probably on the first, of the three.

§ IV. To resume the question of altered pitch. That the voice should, in travelling from one spot to another, undergo alteration in pitch, seems, on first thought, opposed to the commonest experience and to the recognised laws of acoustics. And in experimentally investigating the point, there are some easy sources of fallacy. Bronchophonic voice may be muffled and husky, while the laryngeal tone is pure; and the quality of the two may be essentially unlike. Now these differences may readily, unless great care be taken, be confounded with differences in pitch. Fully alive, however, to the possibility of such deception, I have endeavoured to guard against it; and am persuaded, that the pitch of the bronchophonic voice does sometimes irregularly differ from that of the laryngeal. How, then, is the difference explicable? Conceivably (1) by the production of a new note within the chest chiming in within the laryngeal; or (2) by change of laryngeal note during conduction through *varying* media in the thorax.

(1) The production of new note within the chest is possible by unison-resonance, by consonance, and by echo. But the very name, *unison*-resonance, shows that this principle cannot be employed in explanation, when difference of pitch is concerned. Nor will the principle of consonance serve us either. For, though it is true that under favouring circumstances a note differing in pitch from the original one may be generated by consonance, that different note is always an harmonic of the original tone. Now, the difference of pitch we have under consideration is irregular and non-harmonic. Nor will echo help us through the difficulty; for, though an echoed sound may differ from its original in intensity and duration, and, by possibility, even in quality, it always agrees with it in pitch.

2. We are driven, then, to the phenomena of conduction though varying media for release from our difficulty. And though it would probably be impossible to *prove* that the change in pitch is thus actually effected in the chest, there is strong argument in favour of this mode of agency.

Thus (it appears from an experiment of Savart) "let a long flat glass ruler or rod, connected with mastic to the edge of a large bell-glass, perpendicular to its circumference, be very lightly supported in a horizontal position on a bit of cork, and then let the bell-glass be set in vibration by a bow, at a point opposite the place where the rod meets it. . . . In this combination *the original tone of the bell-glass is altered, and the note produced differs both from that yielded*

(a) Every schoolboy knows the increase of tone given to the sounds of the Jew's-harp by placing it in the ordinary position for playing, within reach of a resounding cavity,—the mouth; and there are few who have not accidentally learned the hopelessness of attempting to play, if the said cavity happen to be filled with eatables.

by it, or by the glass rod vibrating alone."(a) Again, Odier long since ascertained, that if hydrogen be breathed, the voice is *raised in pitch.*(b)

Now, here are facts showing that pitch may be modified by conduction from one kind of vibrating solid to another, and that the pitch of sounds is controlled by the nature of the gases in which they are produced. The application of these facts to our subject is sufficiently obvious; and, curiously enough, the inferences to which they lead on the question of altered pitch, lend indirect support to Laennec in assigning the importance he does to conduction.

§ V. Finally, the phenomenon of bronchophony seems to be a resultant essentially of conduction and echo; in a secondary degree, perhaps of consonance; and in very rare instances (possibly, for example, in emphysematous rarefaction) of unison-resonance of the thoracic cavity. There are, besides, some subsidiary conditions, the influence of which cannot be doubted; viz., the density of the gases in the thorax, their composition, their temperature, and the quantity of fluid in the tubes.

But, even with the aid of all these conditions, there are some peculiarities of voice-resonance inexplicable. How happens it, for instance, that, in the great majority of persons, the voice naturally resounds much more forcibly under the right than the left clavicle?

ON THE PATHOLOGY OF ONE FORM OF ENCYSTED EMPYEMA.

By EDWARD LATHAM ORMEROD, M.D.,

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There are certain differences to be observed in the products of inflammation of the same part in different individuals. Repeated observation on a very extended scale (c), has shown, that these differences may be grouped into classes characterised as much by the differences of the constitution of the patient as by those of the local morbid products. It is inferred that the constitutional are the causes of the local peculiarities. At least within certain limits.

I do not wish to enter generally into the discussion of these pathological principles. My opportunities of observation have given me nothing to add to the principles themselves, as they have been laid down for us by more than one pathologist (d) of our own country. I would only, as the nature of my opportunities has rather enabled me, endeavour to illustrate their practical application to particular subjects.

I have spoken, on another occasion (e), of the distinctions of this kind which may be traced in the varying form of those fibrinous masses which are found on the valves of the heart in so many cases of valvular disease of this organ; and of what share the original elementary constitution of this deposited or exuded matter may have had in determining the occurrence of one or the other form. I would here, in the same way, trace the application of these pathological principles to inflammation of the pleura, and more particularly to one form of what is familiarly known as circumscribed or encysted empyema.

The subject requires but few introductory remarks. The changes which ordinary fibrinous exudation undergoes, and its ordinary appearance and properties, are well known. It is effused as a fluid which hardens and contracts, displaying a fibrous texture, from whence its name. Still, in course of time, it hardens and contracts more and more, till it assumes the form and properties of ordinary fibro-cellular tissue, and, under favourable circumstances, at last disappears altogether. But, sometimes, the same parts, whose ordinary inflammatory exudation is as above described, yield a fluid which, from the first, rather resembles pus than fibrin; and a serous cavity, under such circumstances, is filled with opaque, loose, curdy masses. Or, sometimes, though the matters exuded may differ but little in their more obvious characters, and on their first appearance, from ordinary fibrin, yet a more particular examination of their structure and their further progress brings into view some very essential differences. For they are, even in their most compact state, rather granular and friable than tough and fibrous, and their tendency is to soften rather than to harden and contract. And, as this tendency may take effect long after the masses have entered upon a comparatively independent state of existence, such effect would seem to depend on the development of integral properties, innate and inherent in the inflammatory products. Such, generally, are the changes which may ensue in the products of inflammatory fibrinous exudation of the ordinary and the abnormal form respectively.

Many names have been given to this ill-conditioned fibrin. The distinctions between healthy and unhealthy coagulable lymph seem, however, to be most appropriately expressed in terms of their microscopical or more obvious physical character respectively, as the fibrous and granular varieties of coagulable lymph. The granular or corpuscular variety corresponds to Rokitansky's crönpos and Dr. Williams's cacoplastic species.

In speaking thus generally, however briefly, of the secondary changes which inflammatory exudations undergo, it might seem necessary, at least, to allude to that variety of exudation which undergoes no further changes at all. With this we have a complete series,—the plastic, the cacoplastic, and that which undergoes no change for either good or bad, the aplastic. It is indeed necessary to mention this as a possible source of fallacy. For perhaps, in the following cases, the particular examples selected to illustrate the intermediate stages may really have been instances of a stationary and not of a progressive form of disease. Beyond this possible fallacy, which, however improbable, it is yet necessary to keep in mind, the existence of this form of exudation is beside the present question.

It appeared necessary to preface the following cases by these very general remarks on the intimate nature of the secondary processes. Few can doubt that, in examining into these processes, in studying the blood as much as the bloodvessels, and recognising independent properties inherent in organic products, modern pathology has made a most important step in advance of the past generation. Still, it is in our proofs and absolute knowledge, rather than in our views, that this great advance has been made. For one cannot read the remarks of those who have written on inflammation, without feeling that such expressions as the concoction of pus, and so on, were not unmeaning terms to them. Whatever theories may have been involved in this terminology in older times, and, in later times, whatever vague sense may have been generally attached to it, to the deeper thinkers, at least, it expressed the occurrence of that series of integral changes, in which they believed, with as firm conviction, and on grounds as sure (save the microscopic evidence) as we do at the present day.

The morbid appearances described in the narrative of the following cases are probably familiar to all. We are all probably well acquainted with those large gelatinous masses of fibrin which are found, at various periods after the occurrence of inflammation of the pleura, lying at the bottom of its otherwise obliterated cavity; and all who are in the habit of examining dead bodies have probably met with circumscribed collections of pus in the same situation. I think that I have met with both these appearances, and with what seem like intermediate conditions, sufficiently often, in a close succession and under similar circumstances enough to justify me in regarding them as the successive stages of one morbid process, and in presenting the three following cases as a series illustrative of the same. In other points of view, also, these cases were very interesting; but it has appeared better, for the sake of greater clearness and brevity, to suppress the notice of all particulars foreign to the present purpose.

Case I.—A man, aged 28, the subject of discharge from the left ear, with severe cerebral symptoms, died of double pneumonia. On examination of the body, the pleura covering the upper lobes was found free on both sides, save an adhesion of recent fibrin on the axillary aspect of each lung. The right lower lobes were universally closely adherent by fibro-cellular tissue; and so was the left lower lobe also, except in the interlobar fissure, and in the angle between the diaphragm and the walls of the chest posteriorly. The

(a) Quoted by Herschell, Art. Sound, p. 807, Encyc. Metropol.
(b) Eod. Loc., p. 766.
(c) Rokitansky, Path. Anat. I. s. 495, *ad fin.*
(d) I believe that I need scarcely do more than mention the names of Mr. Paget and Dr. C. J. B. Williams. To Vogel's Pathology, by Dr. Day, and Hewson's Works, by Mr. Gulliver, in themselves, and for their references to other sources of information, I am likewise very much indebted.
(e) Gulstonian Lectures, *Med. Gaz.*, Vol. XLVII., Lecture II.

interlobar fissure was occupied by a gelatinous-looking mass of fibrin, which had contracted scarcely any adhesion to the neighbouring surfaces. In the angle between the ribs and diaphragm lay a flattened cyst, containing about 15 oz. of a fetid, puriform fluid. The walls, thickest round the edge, were constituted by a compact layer of friable fibrin lined with adherent pus. The lung in the neighbourhood of the cyst had a gelatinous appearance, from the infiltration of serous fluid; and the anatomical characters of pneumonia were lost at this point, ceasing at some lines' distance from the walls of the cyst, which were very firmly connected with both the visceral and parietal layers of the pleura. There were no tubercles in the lungs.

The morbid appearances in the following case supply an important link connecting the two stages of the morbid process under consideration described in that just detailed:—

Case 2.—A woman, aged 23 years, died of fever, twelve months after having received a blow on her side, to which accident she used always to refer the constant pain and cough which she had suffered ever since. On examination of the chest after death, the right pleura was found free; the left (the side of the injury) was universally adherent; in front, by loose, easily separable agglutination of the two pleural surfaces; behind, by a layer of fibro-cellular tissue, which was of uniform thickness and consistency throughout, except at the lower part: here it contained within its substance, nearer to the pulmonary than to the costal surface, a mass of gelatinous-looking fibrin, fully a quarter of an inch thick. This mass shaded off on the sides gradually into the substance of the false membrane in whose interior it lay; but was bounded by a tolerably distinct ring round its edges, at the line where the two layers of the false membrane diverged, as it were, or re-united to enclose it. It was of a flattened oval form, measuring about 7 by 3½ in., and crossed without entering the interlobar fissure. A few tubercles were scattered through the apex of the right lung.

If I am right in referring the masses found in the obliterated pleural cavities in both these cases to the same morbid process, they would stand in the following order:—In *Case* 1, in the mass of fibrin which occupied the interlobar fissure, we have an example of the earliest form of this series of morbid appearances. The mass had contracted scarcely any adhesions to the neighbouring parts; it was of almost uniform consistence within and without alike; it had all the appearance of having been recently deposited; and, if we must assign it a date, it would seem most likely to have originated with the recent fatal attack of pneumonia. *Case* 2 takes up the history a little further on. After about a year had elapsed from the probable period of the deposition of the mass, we find that it had contracted adhesions, and become hard and tough on the surface, though within it still closely resembled the structure of the more recent product in the previous case. *Case* 1 takes up the history of the morbid changes again, after a long but uncertain interval. The mass, in the angle between the ribs and diaphragm, which illustrates this stage, now contained no longer a gelatinous fibrin in its interior, but a diffluent puriform matter, which waited only an opportunity to discharge itself. The case next following, where the discharge of the contents of the cyst was attended with fatal consequences, completes the history of the internal changes.

Case 3.—A man of middle age, of strumous constitution, working hard and living carelessly, had a severe attack of "inflammation of the left side." But he got apparently well, and so continued for about seven years. Then he began to fail; he suffered from cough, and had that peculiar appearance which we so often see in the subjects of aneurism of the arch of the aorta. Nothing, however, could be determined by repeated most careful examination, as suggested by this particular appearance, beyond comparative dulness and impermeability of the left side of the chest. He got rapidly worse. With the aggravation of the symptoms the case became more clear. Evidence was obtained of perforation of the lung; and he died, with the physical and other signs of partial pneumo-thorax of the left side.

Omitting the description of other changes not relating to the present subject, there appeared, on dissection, almost universal adhesion of the left pleura. The pulmonary and costal surfaces were closely united by dense, firm tissue, except for about a hand's-breadth over the lower lobe behind. To this extent the two layers were separated by a collection of thick, curdy, puriform fibrin. The sac communicated, through the substance of the lung, with a neighbouring bronchial tube, by a small, well-defined orifice. A very few small tubercles were scattered through the substance of the lungs.

In this case the more urgent feverish symptoms, and, indirectly, those leading to the fatal termination, appeared clearly referable to the pointing, so to say, of this collection in the pleura. Quoting it as a very rare though very striking case, I need not fear lest I should be thought to overrate the probability of a similar occurrence. Such cases are very rarely met with thus painfully complete. And this one has not been cited to mark how severe the symptoms may be when they do occur, so much as to show for how long a time the process on which they depend may be delayed. For this delay is not more characteristic of such rare forms of disease than of the more ordinary cases, where the collection points externally, and, during life, can only by contingent physical signs, and by the previous history, be distinguished from a common subcutaneous abscess in the same situation.

To the anatomical history of the form of empyema, exemplified in the above cases, there is little to be added. The successive morbid appearances tell their own story very clearly. There are some points in its pathology, however, which (studying, in the same way, one case by the help of another) seem to be better illustrated by the details of the following case, drawn from a different form of the disease:—

Case 4.—A man, presenting nothing particular in his general condition to forbid the operation, underwent amputation of the thigh. Pleurisy set in on one side; and, after some days (as far as physical signs can be trusted), on the other also. On examination after death, the pleura, which, there was reason to suppose to have been first attacked, was found to be coated with fibrin of the ordinary character. The cavity of the opposite pleura contained curdy, puriform flakes, floating loose in turbid serum. As if it were not till the second pleurisy set in that the change in the patient's condition, revealed in the differing nature of these products, manifested itself.

Less striking illustrations are of daily occurrence in the contrast between the tough fibrin effused in the commencement of pleurisy or pericarditis, and the soft, puriform products of recrudescent inflammation which infiltrate the meshes of the older tissue; and other similar instances will readily suggest themselves. But, in cases of such a kind, the question of the influence of the earlier on the later organic products will recur. And it is only in observations like that just detailed, where the different products are separated, that such a fallacy can be excluded. Only so can we be assured, that the difference of the later product is not referrible to the fact of its having been eliminated on a surface of a different nature, on the membrane, namely, which has been formed upon the serous surface during the earlier period of the inflammation.(a)

Considering the usual state of the patients who present this modification of the ordinary process of inflammation, namely, that they are commonly such as have been exhausted by protracted disease, by severe surgical operations, or by parturition, that they are the class where we always fear the formation of aphthæ, or bed-sores; considering this, it is clear, that active inflammation of such a form involves, on all accounts, great present danger. And, if we look beyond this present danger to the cases where it has been surmounted or never threatened, still the future is not without grounds for apprehension even in these. We have to consider the remote effects of a morbid product of this nature having been thrown out in the deep-seated cavities of the body, and in the neighbourhood or even the substance of important organs. For there are dangers connected with its removal from such positions, and its removal is an event much more

(a) There is no reason to question the commonly received opinion, that in the masses resulting from ordinary fibrinous exudation from serous surfaces, the outer layers (that is, those next the parent membrane) are formed first, and the inner layers by transudation through these. But, where the effused matters are incapable of organisation, this rule no longer applies. Thus, in croup, we may find the adventitious membrane which was first deposited raised from the parent surface by a layer of pus, which has subsequently formed beneath it, but which, from its want of a regular organisation, has been unable to traverse it. (See Gendrin's Histoire Anatomique des Inflammations, sec. 806.) It seems probable that the flakes of curdy fibrin which we find sometimes in inflamed serous cavities have been thrown off the parent surface in this way: and this is the best explanation of the little pits which we may often notice on the adventitious coats of the liver or spleen. (See also Hodgkin: Morbid Anatomy, Vol. I., pp. 52, 125.)

probable than the occurrence of the ordinary salutary changes in, or of absorption of, the exuded matters. And the lapse of time gives us no security against these contingent dangers, inasmuch as they are dependent on the inherent tendencies of the mass. Instance *Case* 3, above detailed.

There is another point involved in the pathology of this form of encysted empyema, which may be more clearly displayed by reference to quite a different class of cases. In those already detailed, the results of modification of the products of inflammation cannot well be separated from those of an integral change of the fibrin of the blood independent of inflammation. The following unusual case, however, supplies an illustration of this last occurrence in the most simple and unequivocal form.

Case 5.—A poor, wretched, intemperate man, who had struggled with disease and want, in whom for the last four months the sufferings had more particularly hinged on palpitation and pain in the epigastrium, came into St. Bartholomew's to die, in June, 1848. He was an object of much curious interest during the time that he survived; but no one succeeded in completely unravelling all the physical signs of disease of the heart through the pericardial friction sound by which they were masked.

On examination of the body after death,—passing over other morbid appearances which have no connexion with the purpose for which the case is quoted,—there was found to be very extensive disease of the vascular system. The aorta was rigid from earthy deposit with atheroma. From the right, and in front of the aorta, sprung an aneurismal sac of about two fluid ounces' capacity. This was filled with a dark, imperfectly laminated coagulum, from which a thick, purplish, creamy fluid exuded on pressure, and more of this fluid lay between the coagulum and the sac. About an ounce of a similar fluid was contained in another sac, lying to the right, and rather in front, of the pulmonary artery, and apparently, but not very distinctly, communicating with the aneurismal sac first noticed. The coagulum contained in this first sac was connected with the recent one found, as usual, in the aorta, by means of a thick white fibrinous mass; and from this again there sprung a rounded process, which, on section, was seen to contain a thick fluid, similar to that usually observed in Laennec's globular vegetations; to which morbid products, indeed, this larger process bore a very exact resemblance.

The evidence of this case, in the particular point, appears to be very important. Here was a most unusual deviation from the ordinary condition of the fibrin in aneurismal sacs. Removed from all surrounding vital agencies, as far as it is possible for any substance still remaining in the body, and retaining vitality, or at least resisting putrefaction, to be, the fibrin had undergone the same changes which we have already traced in the interior of large fibrinous exudations in the pleura. And the cause of this integral change was still more distinctly referred to the fibrin itself, rather than to any influence of the surrounding tissues, by the result of the examination of the more recent coagulum. For the fibrin just newly deposited displayed the same tendency to soften, and the same integral changes, as did that which had concreted long before into the laminæ of the coagulum in the aneurism.

This case is interesting, as bearing on another point of importance to the present subject. Thus, it appears, at first sight, very inconsistent with the definite tendencies argued to exist in nascent fibrinous exudation, that, in a mass believed to be of uniform constitution throughout, the outer layers should undergo the normal, and the inner layers the abnormal, series of changes. In the cases which are the proper subject of this paper, to obviate this apparent inconsistency, we may admit of a difference of composition, and suppose the outer layers to have been formed first, before the peculiarities, constitutional or local, as the case might be, which determined the nature of the later exudation were called into action. But, in the case just detailed, we may trace these differences in the subsequent history of the outer and inner layers respectively, under circumstances where it can be scarcely doubted that the mass was originally of the same composition throughout. On the evidence of cases of this kind, the law, (that is, the expression of general opinion,) that its future tendencies are immutably imprinted on the nascent product, is still admissible with the qualification, that these tendencies, when abnormal, are liable to be corrected by the neighbourhood of healthy tissues, or, that they are more rapidly and characteristically displayed in the parts furthest removed from such possibly corrective influences. I think, however, that we must not call such a qualification an inconsistency.

To recapitulate briefly, and in more general terms, what the above cases are intended to illustrate. The unusual products of inflammation of serous membranes, which we recognise and know where to expect in acute disease, may be met with in the pleura (taking our illustrations from this part) in a chronic form. The fibrinous products originally effused remain, under such circumstances, long undistinguishable from ordinary fibrinous exudations, save in their indisposition to undergo the ordinary changes. But their peculiar properties are not lost, for all that they may have lain hid so long. The interior softens at last into a matter closely resembling pus; and the walls, even though they may have undergone the changes of ordinary fibrin, sometimes display their origin in their tendency to earthy degeneration. (a) As to the immediate causes of the softening; though we may dismiss the idea of the direct local agency of inflammation, yet it must be observed, that the three cases, (I. III. V.) cited as examples of this secondary softening, died of acute disease, if not of actual inflammation.

The subject of encysted empyema is not merely pathologically interesting. Clinically as well as anatomically, the distinction between general and partial pleurisy is important. I would, therefore, briefly, in conclusion, survey it from this point of view.

There can be few things more gratifying to a patient than to be at once delivered of the load of fluid which had oppressed his breathing, by the very simple operation of tapping his chest. The pain and danger of the operation are small beyond all proportion to the amount of relief conferred. And the quantity of fluid drawn off furnishes an answer which all are willing to accept, as to the propriety of the operation, had there been any doubt before. One feels almost ashamed of credit obtained on such easy terms as by tapping a chest distended with fluid.

But the case is wholly altered, when we have to deal with circumscribed, or encysted empyema. The distress of the patient under such circumstances is at least as great as in the case of general pleural effusion. For, though he may not suffer so much from general oppression of his breathing, yet the difference is more than made up, I suspect, by that very painful sensation which arises from the tension of parts. With all this urgent demand for relief, and evident distress and danger, there is the most extreme difficulty in determining both the exact nature of the lesion, and, what is of the greatest importance towards its removal, its exact seat. And after all these difficulties, there comes no such evident confirmation, from the amount of the products of the operation, that it was required. The presence of three or four ounces of pus would scarcely seem enough to produce all the constitutional symptoms of empyema. And the evacuation of so small a quantity is, at first sight, scarcely a sufficient explanation of the immediate relief to these urgent symptoms,—the turning point of a man's life. But from particular observation of these cases, there can be no reasonable doubt of the correctness of this conclusion. Nor, on the more general grounds of analogy, of the comparison, namely, of these cases with those where pus is tightly confined in other parts of the body, have we any reason to reject it.

Now, clearly, the fluid matters, in any case where these symptoms depend upon tension, must be confined by tissues of considerable strength, and so, almost necessarily, of considerable age. Recent soft fibrin could not resist such pressure. Though the matter might, indeed, be confined in a cyst of this nature at first, yet the case would soon become one of general recrudescent pleurisy, in consequence of the new fluid matter being forced into the meshes of the older, but still soft tissue. We must refer the state of parts which

(a) I have no unequivocal cases at command in proof of this statement. It rests mainly upon Rokitansky's expressed opinion, that fibrinous exudations which undergo earthy degeneration have been originally, if solid, of the granular (*crümps*) form.—Path. Anat. Band. I. s. 270. Gendrin also observes, that earthy degeneration is most apt to occur in cases where the absorption of the fluid products, and the reparation of the other effects of inflammation has been tedious; in cases, judging from his description, very analogous to Rokitansky's *crüpos* class.—Hist. Anat. des Inflam. s. 250.

seems essential to the production of encysted pleurisy, in all the severity of its symptoms, to one of two pathological conditions. Either there must have been previous partial pleurisy, terminating in partial adhesion, and leaving the rest of the pleura untouched, and free to become the seat of a new attack of inflammation with effusion. Or else all the parts may have shared in the first attack of pleurisy, though this limited portion of the membrane, from whatever cause, have not become adherent. These appear to be the only two available explanations; for considering how very rare, not to say quite unknown an occurrence inflammation (a) of old tough connecting fibro-cellular tissue is, on general grounds, apart from the anatomical objections which examination of particular cases supplies, we may reject inflammation of a limited portion of such connecting tissue as a common cause of encysted empyema. In choosing between these two explanations, the fact of the contents of pleural cysts being usually puriform (b) favours the latter,—namely, that of an incomplete adhesion between the two opposite surfaces to such an extent. Expressed in general terms: this form of encysted empyema seems to belong rather to pleurisy, where the extent of repair, rather than the extent of inflammation, has been limited.

Speaking of encysted empyema generally, of the cases where the obliteration of the pleural cavity has not been complete, but a cyst filled with puriform fluid remains:— there are no grounds for supposing that formidable symptoms are more likely to ensue in those where the disease has originated in the mode above described, than where it has resulted from the more ordinary processes. For it may be necessary to mention, that the proper subject of this paper is not the ordinary process by which encysted empyema is formed. Happily, the uncertainty of these abstract pathological questions has no relation to the question of treatment, when, at some remote period, if so it should be, these patients come under observation; for the rule is the same in all cases of obscure chest disease following pleurisy,—however slight the symptoms of the original disease, however complete the recovery, and however long the interval, to examine most minutely the condition of the chest. We should look very anxiously after any signs of imperfect reparation, after anything which led us to suspect that the lung was not in close contact with the walls of the chest at any part, especially posteriorly, and in the lower part. And though very often such curious anxiety might be of little good to the patient, nor the information obtained available to direct any measures for his cure or even relief, yet, to solve one of these clinical problems now and then, so as to cure one patient who would otherwise have died, would be an ample reward for all the pains spent to no purpose on the rest.

If it were only that this subject is so obscure and so difficult, it would be very interesting as a pathological exercise, even though it were of no practical importance. But, in fact, encysted empyema constitutes a very anxious class of cases, (anxious for the very reason, that there may be so much to be done,) depending on our care, and accuracy, and decision. The doubts and difficulties which beset the diagnosis and treatment of pleural effusions are all concentrated here. Our pains in making out many cases will often give us only the sad assurance that they are hopelessly irremediable, and the less we do the better. But it is not always thus; all these cases are not to be left alone, after our pains spent in making them out. It is often, indeed, a very difficult task to discriminate those cases to which curative means are fairly applicable, and one requiring the highest skill and refinement in auscultation. But from these difficulties it is very satisfactory to turn to the recorded success of the results of surgical interference with cases of empyema, which, from the small amount evacuated, we may consider as encysted.

It would be idle to dwell on the treatment of this class of cases here. For the skill which should distinguish them during life could scarcely be divided from the knowledge of the general principles which should guide their treatment. And the particular indications of each case could not fail to display themselves in the searching examination on which alone their diagnosis could be founded.

(a) As distinguished from purulent infiltration by gravitation.

(b) See on this point "Hodgkin's Morbid Anat.," Vol. I., p. 108, and Gendrin Œuv. cit., sec. 165.

ON THE PROPAGATION OF YELLOW FEVER BY CONTAGION.

By A. BRYSON, M.D.,
Surgeon Royal Navy.

Unless a very large proportion of the members of the Medical profession be greatly in error, it appears to me that the following summary of facts would not be out of place as a pendant to the "Report on Yellow Fever," lately presented to the public by the Board of Health. Acting, no doubt, from purely disinterested motives, and with a view to the public good, the Board have collected an immense amount of evidence for the purpose of proving the non-contagious nature of that disease, and, consequently, the inutility of quarantine restrictions; but, entertaining apparently an undoubting belief in the soundness of their own preconceived opinions, they have not thought it necessary to bestow the same degree of labour and attention in collecting evidence opposed to the theory they have adopted; or else, having fully examined all the facts which tend to support the theory of infection, and having collected all the information they could from men practically acquainted with the subject, but holding opinions opposed to those adopted by the Board, they have come to the conclusion, that all the evidence which can be adduced in proof of its propagation by infection is unworthy the attention either of the Government or of the public.

The good or evil that may result from the distribution of the Report on the Yellow Fever remains to be proved; but, whether it be good or evil, the amount of responsibility incurred by the three members who have signed it is, or ought to be, a sufficient guarantee that they have so carefully examined every circumstance connected with the points at issue, as to enable them to deliver a conscientious opinion, and to retire from their task without the slightest dread of the consequences.

It is almost superfluous to quote the oft-repeated tale of the Bann, but it stands on record as the first, and perhaps the best proof that has yet been adduced of the propagation of the disease by a specific personal virus.

Her crew contracted fever at Sierra Leone, in March, 1823. On the 25th of that month she went to sea, where, far from the influences of the land, the disease continued to prevail considerably beyond the usual period of incubation. After a voyage of thirty days, she anchored, on the 25th of April, at the Island of Ascension. The sick were immediately landed, and placed in tents at a distance from the garrison, and quarantine restrictions were established, but were not enforced with sufficient care. In the course of three weeks after the arrival of the vessel, the disease broke out among the residents on the island, where it never had been known before to prevail.(a) In the course of a few months it entirely ceased, and did not again appear until re-introduced ten years afterwards under precisely similar circumstances.

In May, 1829, the Eden and Champion sailed from Sierra Leone, having yellow fever on board, and proceeding down along the coast, they arrived at Fernando Po,—the one on the 11th, and the other on the 14th of June. A number of cases of yellow fever were immediately afterwards landed, and, in the course of about three weeks, the disease made its appearance among the white residents in the settlement, and continued to prevail (being kept up by the arrival of susceptible Europeans) until the following year, when it entirely ceased.(b)

Although this is, perhaps, one of the most unhealthy islands in the world, still there is no proof, nor is there any reason to believe, that yellow fever had ever before shown itself there; and it most certainly has not re-appeared, since it ceased at the time above-mentioned.

In the same year the Sybille, which had been cruising in the Bights of Benin and Biaffra, came into the anchorage at Fernando Po, on the 21st of June. On the following day she received a number of men from the settlement, who had been left there by the Eden and Champion.(c) On the 26th of June the disease began to attack the crew of the Sybille, although it did not appear in any other vessel in the Bights, nor in any vessel lying in the adjacent anchorages of the island, or of the mainland.

(a) *Vide* Sir William Burnett's Account of the Fever in the Bann.
(b) *Vide* Epidemics of Sierra Leone.
(c) *Vide* Epidemics of Sierra Leone.

In May, 1836, yellow fever was contracted by the crew of the Curlew, at Sierra Leone; immediately after which she went to sea, and, on the 6th of June, she anchored off Bathurst, in the Gambia, with many of her crew ill of the disease. All the sick men were immediately landed, and, in a fortnight afterwards, the disease began to attack the white population in the settlement, the first person attacked being the surgeon who attended the men from the Curlew; and the second, his servant. The disease prevailed for a few months, and then ceased.(a) There is no record that it had ever before made its appearance in the Gambia, and most certainly it has not appeared there since.

While the fever raged at Bathurst, several merchants left the colony in a small vessel on the 9th of August, and proceeded to Goree, a small island about 100 miles to the northward of the Gambia. On the passage one of them was attacked with the fever; and on the 12th, the day of their arrival, he was landed at Goree, where he died. His mother, who had attended him, was attacked on the day of his death, and also died. Several other gentlemen arrived by another vessel on the 17th, from the Gambia, one of whom was attacked on the 19th, and died with black vomit on the 21st. About three or four weeks after these events, the disease broke out at Goree, and carried off a vast number of the population.(b)

"Goree has been colonised by Europeans upwards of ninety years, but it does not appear, either from written record or from oral tradition, that it was ever visited by yellow fever before this epidemic broke out, and most certainly it has not been so afflicted by that disease since."(c)

In December, 1837, the crew of the Ætna contracted yellow fever at Sierra Leone, and afterwards sailed for the island of Ascension. The disease, far out on the ocean, continued to attack the crew long after the expiration of the usual period of incubation,—namely, upwards of forty days. She arrived at the island of Ascension on the 20th of January, 1838. The fever cases were landed on the island, and placed in quarantine. Several other vessels arrived from the coast with the disease on board, or with patients recovering from it; the last on the 23rd of March. In less than a fortnight from the latter date, the disease again broke out among the residents, and after raging with great fatality for two or three months, it began to decline, and finally ceased. Not a single case of the disease had been observed on the island since 1823, when it was introduced by the Bann, and up to the present period it has not reappeared since its cessation in 1838, when introduced by the vessels arriving from Sierra Leone with the disease on board.(d)

The crew of the Eclair were attacked with yellow fever at or near Sierra Leone in 1845. Whether the disease in this instance originated within the vessel, or was introduced from the land, is immaterial as regards the questions of contagion and quarantine. She ran off the coast, touching, in her course, at the Gambia and Goree, and anchored in an English harbour at the island of Boa Vista. All the fever cases were landed on a little island in the bay or harbour; and the remainder of the crew were quartered in the town. In the course of at most two or three weeks, the disease began to attack a guard of soldiers who were employed at the fort in which the sick were lodged, and subsequently it appeared in the town; the first person attacked being a woman who lived in the house next to that in which were located two of the surviving soldiers of the guard when ill, with whom she had had frequent communication. The disease then began to extend, and rapidly spread all over the town, and subsequently, not to all, but to some of the adjacent villages.(e)

Now, it is not within the memory of man, nor is it on record, that yellow fever ever before made its appearance on this island, or, indeed, on any other island of the group; and since the epidemic which followed the arrival of the Eclair disappeared, no cases, so far as can be ascertained, have occurred either in Boa Vista or in any of the other islands.

Whether or not the eruption of yellow fever in these several instances was merely an accidental occurrence following its introduction among a previously healthy population, I will leave others to judge; but, notwithstanding the conclusions come to by the Board of Health, under similar circumstances, in future, I would have no hesitation in recommending the adoption of quarantine restrictions,—but quarantine restrictions differing materially from those which are practised in the present day.

(a) *Vide* a paper by Dr. Ferguson in the *Medical Gazette*, August 31, 1839.
(b) Ibid.
(c) *Vide* a paper published by Mr. Ferguson, Staff-Surgeon and late Governor of Sierra Leone.
(d) *Vide* Climate and Diseases of the African Station.
(e) *Vide* Dr. M'William's and Dr. King's Reports.

GENERAL CORRESPONDENCE.

THE UTERINE SOUND.

[To the Editor of the Medical Times and Gazette.]

SIR,—I had intended that my controversy with "M.D. Londin," so far, at least, as I was concerned, should end with my last letter; but I consider it due to myself to explain one passage in that letter, which he has pointed out, and which, taken as he construes it, certainly bears anything but the sense I hoped and wished to convey. I cannot help thinking that the meaning of it might be easily seen through by one really anxious to discover it, still, on re-perusing it, I must acknowledge that "M.D." is quite correct in his remarks on it. I will not, in explanation, plead a mere "typographical error here," for if I did so I should be guilty of a falsehood. The obscurity of the passage resulted from my writing in the midst of numerous occupations, and with a foregone impression on my mind.

The passage referred to is the following:—"If the escape of a brownish, bloody-coloured fluid, from a dilated os and cervix uteri, be not an indication of a canal (whether quite pervious or not) preternaturally and relatively too small for its purposes, I ask what it is an indication of? If this discharge be not evidence of retained menstrual fluid, what is it?" I fully allow that the above sentence is very badly constructed; it does not carry the meaning intended by me, but it occurred as follows:—

In the *Medical Times* for December 6, Dr. Rigby gave the clinical report of a case, which he diagnosed by the sound to be one of obstructed dysmenorrhœa, and which he successfully treated by employing mechanical dilatation of the contracted uterine canal, with the escape of some "brownish, bloody-coloured fluid," etc.: "M.D. Londin.," on the other hand, objected, "that this model case of mechanical dysmenorrhœa from obstruction was, from Dr. Rigby's own showing, not a case of obstruction; that the diagnosis was erroneous, and that the treatment employment was uncalled for, and consequently improper;" that it was, in short, merely an instance of those obstetric "abominations" which have done so much violence to "M.D's" moral sense, and which he feels it to be his vocation to expose and put down; for no evidence, according to him, had been given by Dr. Rigby to show that the escaped fluid was catamenial. Now, believing that the circumstances of the case, as detailed by Dr. Rigby, presented the precise kind of evidence required in proof of his accuracy, I penned the sentence under consideration, referring, as any unbiassed person must see, to the case in its entirety, as related by Dr. Rigby, and commented on by "M.D." "If," I said, "the escape of some brownish, bloody-coloured fluid from a dilated os and cervix uteri," etc. I confess, however, that it should have been, "from an os and cervix uteri, which were found contracted, and which had been dilated by mechanical means," etc.; and then, perhaps, even "M.D." would have comprehended its meaning.

Of the reddish discoloration of the sound, or the occasional escape of a little blood after its use, I am quite as well aware as "M.D.;" but he knows, if he knows anything about the matter, that this is a very different affair from that related by Dr. Rigby.

To "M. D.'s" other objections and statements I do not think it worth while to reply; for I feel that it would only tend to prolong a useless discussion, in which "M. D." and I are not contending on equal terms. Moreover, "M. D." has conceded the chief point in dispute, viz., that the uterine sound is applicable to some cases. This is just what I claim for it; here, then, we agree; but, unfortunately, not so as to the size of the instrument, or the precise kind of cases in which it may be employed. I deem it valuable in certain uterine ailments and conditions where "M. D." is at issue with me, and on his part quotes its employment in the differential diagnosis of "pendulous tumours of the uterus" and "pregnancy;" in which description of cases I confess my total and wilful ignorance of its use.

"M. D. Londin" has been good enough to tender me a piece of advice. As I am now taking my leave of him, I should like to reciprocate his kindness; and therefore I will venture to recommend him, for his own sake, to explain, without

any more hesitation, what it was he meant to convey by describing the bulb of the uterine sound as varying "from a quarter to half an inch in diameter;" a task which he has not yet accomplished. If he cannot, as I fear, do this, I entreat him to say so at once candidly; and when next he feels impelled to set about correcting anonymously the supposed improprieties of his professional brethren, or impugning their motives, not to draw so largely upon his imagination,—a faculty which has led some people, as he knows, into all sorts of strange conceits, even to the singular anatomical attempt of manufacturing nerves out of cellular tissue.

I am, &c.

Birkenhead, Cheshire. CHARLES HAYES HIGGINS.

SKODA'S THEORY OF CONSONANCE.

[To the Editor of the Medical Times and Gazette.]

SIR,—I quite agree with Dr. Drysdale, that Dr. Walshe has, in some degree, misinterpreted Skoda's theory of the cause of the increased thoracic voice; and, if I am not mistaken, there really is no great difference between Skoda's theory, and his manner of interpreting it, and that proposed by Dr. Walshe. Both these observers reject Laennec's account of bronchophony.

Dr. Walshe suggests that it may be caused by an echo arising from intensification of sound, by reflections brought to a focus within the bronchi. (Walshe, Treatise, p. 129.) He then goes on to say, that the conditions of reflection are fulfilled in a hepatized lung, the tubes being now surrounded by semi-solid material proper to reflect and concentrate sound. They resemble so many speaking trumpets, in which the augmentation of sound is produced by reflection from their quivering walls. By this reflection, vibrations, otherwise divergent, are propagated in the same direction, and intensification of sound is produced. "Skoda's," he says, "exclusion of the tracheal and bronchial walls from all participation in the phenomenon (he is speaking of the increased thoracic voice), is at variance both with theory and experiment."—P. 129.

Now, what says Skoda? The force "of the consonance depends upon the form, etc., of the enclosed space, and upon the nature of its walls; the more completely the sound is reflected by the walls, the stronger is the consonance.(a) The cause of the increase of sound in a speaking-trumpet is well known. The air contained in the trachea and bronchial tubes consonates with the voice, in so far as the walls confining it have, in respect of their power of reflecting sound, a similar or analogous condition to the walls of the larynx, of the mouth, and the nose." He then tells us, that the consonance of the voice is very feeble in the finer bronchi; for these are merely membranous tubes, ill-fitted to reflect sound; if the consonance be increased in these, either their walls must have become cartilaginous, or the tissue around them must have become condensed.—P. 40. All those diseases which render the parenchyma of the lungs firm, dense, and solid, increase its power of reflecting sound, and the force of the consonance, and the reflection of the sound, are greater or less according to the density of the parenchyma.—P. 41.

Now, surely, there is little difference here between the conditions laid down by Skoda as absolutely necessary for the increased thoracic voice, and those laid down by Dr. Walshe. How Dr. Walshe can make Skoda reject the tracheal and bronchial walls from all participation in the phenomenon, I am at a loss to understand; as Skoda describes in such particular manner the necessity of the bronchial tubes being rendered good reflectors of sound in order to produce the phenomenon.

Perhaps, in justice to Skoda, you will be kind enough to insert the above. I am, &c. W. O MARKHAM,

Assistant-Physician to St. Mary's Hospital.

Clarges-street.

SUPERINTENDENTS OF COUNTY LUNATIC ASYLUMS.

[To the Editor of the Medical Times and Gazette.]

SIR,—The observations of "Justitia" in your number of the 12th of June deserve the attention of those members of the Profession who seek appointments in public lunatic asylums.

It will be found, upon inquiry, in asylums where a seat at the Board of Directors has been conceded to the superintendent, with absolute power in the hiring and dismissal of servants, etc., that great mischief has ensued. Several years since an asylum was established in this county by voluntary contribution: at the opening of the Institution, great power was given to the superintendent, and a seat at the Board of Directors.

(a) Skoda's Treatise, p. 39. Fourth edition.

The physicians residing in the town declined the appointment of "visiting physicians;" and wisely, for they would have had no power to enforce their directions.

The superintendent having run to the length of his string with the Directors, and receiving a check, resigned. After he had left the asylum, a large bill was sent in by a respectable legal firm in the town, for fees and charges in defending actions commenced by servants of the establishment against the superintendent for wages; and these proceedings were unknown to the Committee.

In all public medical charities the stipendiary officers should be represented by the honorary office-bearers; while a man is a stipendiary he is a subordinate, and, if left without supervision and control, may permit serious mischief to be done. Your Correspondent has referred to Hanwell. When Sir W. Ellice resigned, (all respect to his memory,) it was said that he did so in disgust from his power being diminished.

Has the present distinguished head of that asylum been less successful under a new order of things?

I am, &c. A COUNTRY SURGEON.

[To the Editor of the Medical Times and Gazette.]

SIR,—When an objector stumbles upon and makes known your strongest reason for an opinion you have stated without giving that reason, you should not, on account of the motive, be ungrateful for the fact,—that he seizes the sharp edge of the argument, and presents you with the handle.

On this principle, have the goodness to convey my thanks to "Justitia," who will, I hope, excuse the liberty I shall take in re-stating his argument somewhat more plainly.

He thinks that the superintendent of a lunatic asylum should not be present at the meetings of the visiters, because it would be disagreeable to the feelings of the other officers; who, it is supposed, would be prevented by his presence from making their appeals to the Board.

If this means anything, it means that, in "Justitia's" opinion, the normal condition of asylum officers is one of misunderstanding and quarreling; and that, under such conditions, for the sake of fair play, all the parties should be excluded from the Court of Appeal. I object to the premises, and affirm, with little fear of contradiction, that, except in one or two well-known instances, the officers of asylums work together with remarkable unanimity and concord; and that the presence of the superintendents at the Board-meetings is far more frequently advantageous to their brother officers and their subordinates than it is to themselves. The exceptions occur in those asylums where the visiters have a *penchant* for clever, report-writing matrons, or for managing the superintendent's business themselves, by means of snug little sub-committees, which the most influential county men find it impossible to attend.

The strongest reason for giving sufficient power to the superintendent is, that under such an arrangement, patients, servants, and officers are more comfortable and contented, than when the affairs of the establishment are managed by peddling sub-committees, which act as ready courts of appeal to all the little quarrels of the inmates.

"Justitia" has strung together a list of appellations, synonymous and otherwise, and asserts, that a superintendent should not be all these. I never heard of any one proposing that he should be, and entirely agree on this point, although I do not agree with the manner in which the very narrow position taken up in my letter has been amplified until it is scarcely to be recognised. Of this I must complain, and say, *Fie at Justitia!* I am, &c.

A COUNTY SUPERINTENDENT.

MATICO IN UTERINE HÆMORRHAGE.

[To the Editor of the Medical Times and Gazette.]

SIR,—The late discussion in the Medical and Chirurgical Society has recalled to my recollection a correspondence carried on in the *Medical Times* during the last autumn on the subject of uterine hæmorrhage.

I did not observe in the notices of the treatment, that the use of matico as an effective remedy was adverted to, of which agent, if it were in common use, some mention would probably have been made.

I wish to draw the attention of the Profession to it, believing that its use will in many cases prove of essential service. For more than three years I have been in the habit of occasionally using the infusion as an injection into the uterus in cases of hæmorrhage, and have generally found it succeed in diminishing, and finally arresting the discharge. In applying it, the end of the pipe of the

syringe was introduced into the uterus, and a quantity of the infusion, at a temperature of 50° to 55°, injected, sufficient to irrigate the cavity. The infusion of matico used in this way appears to be peculiarly adapted to arrest the bleeding so often consequent on retention of decidua after abortion in the early months. It is applicable even in *post-partum* hæmorrhage, mixed with an equal quantity of infusion of ergot, to which, if a general stimulant is necessary, proof spirit may be added. It is also useful in menorrhagia and other uterine discharges.

If the publication of this note will lead accoucheurs to test the power of this styptic in such cases its purpose will be fully effected.

I am, &c. M.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 18th inst. :—

Barker, Alfred James, Paramatta, Australia.
Dansey, George Frederick, Blandford, Dorset.
Gwynne, Daniel, Brighton.
Leonard, Frederick Lewis, Royal Navy.
Lewis, Charles, Killarney.
Marsland, Robert, Manchester.
Palmer, Charles, Kirton-in-Lindsay, Lincolnshire.
Skipton, Samuel Stacy, London.
Tourrette, Charles, Mauritius.
Wigglesworth, Thomas, Coleford, Gloucestershire.

New Councillors.—From an official advertisement in the *London Gazette*, it appears that the following gentlemen have given the necessary notice of their intention to present themselves for election into the Council of the Royal College of Surgeons:—Messrs. Bransby Blake Cooper and William Coulson for re-election, and Mr. George Gulliver, of St. Mark's-crescent, Regent's-park, nominated by Messrs. Judd, Lloyd, Phillips, Paget, M'Whinnie, and Mantell; Mr. Richard Partridge, of New-street, Spring-gardens, nominated by Messrs. Norman, Fergusson, Bowman, Shaw, Wilson, and Paget; Mr. Thomas Tatum, of George-street, Hanover-square, nominated by Messrs. Cutler, Shaw, Hewett, Pollock, Johnson, and Morgan; and Mr. Alexander Shaw, of Henrietta-street, Cavendish-square, nominated by Messrs. Stone, Paget, De Morgan, Tatum, Bowman, and Moore.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 17, 1852:—

Dix, Arthur, Beech-street, Barbican.
Puckle, George, Camberwell.
Salter, John Reynolds, Exeter.
Timothy, Peter Vincent, Redcross-street, Barbican.

Medical Honours.—We have great pleasure in announcing, that, at a Convocation held in the University of Oxford, on Wednesday last, Dr. W. P. Alison, Professor of Medicine in the University of Edinburgh, and one of Physicians in Ordinary to Her Majesty in Scotland, and Richard Owen, Esq., F.R.S., and Hunterian Professor and Conservator of the Museum of the Royal College of Surgeons, had the honorary degree of Doctor in Civil Law conferred on them.

The Memorial of the Extra-urbem Licentiates, and the New Charter of the College of Physicians.—The following letter has been received by Dr. Laycock from Dr. Hawkins, in acknowledgment of the memorial of the Associated Extra-urbem Licentiates:—

"College of Physicians, London, June 22, 1852.

"Sir,—I beg to inform you that your memorial, addressed to the President of the Royal College of Physicians, has been laid before a Committee of the College, and has been received by them with the attention due to it. I am directed, however, to state, that no further measures can be taken at present towards obtaining a new Charter for the College, on account of the impossibility of procuring an Act from the present Parliament. And I am to assure you, that, before any settlement is come to between the College and the Government, the arguments contained in your memorial shall receive the fullest consideration.

"I am, Sir, your obedient servant,

"Francis Hawkins, M.D., Registrar.

"To Dr. Laycock, etc., etc., etc."

University of Oxford.—At the Convocation, held on the 17th inst., it was proposed to grant to the Regius Professor of Medicine and Anatomy 100*l.* out of the University chest, to be expended partly in setting up a portion of the zoological collection lately presented to the University by the Rev. F. Hope, and partly in the purchase of other anatomical preparations for the illustration of a course of lectures.

Mr. Roundell Palmer, M.A. and Q.C., has been appointed Deputy High Steward of the University of Oxford, in the room of the Hon. J. Chetwynd Talbot, M.A. and Q.C.

Obituary.—We regret to announce the death of Mrs. Bradbury, well-known as the proprietress of a Lunatic Asylum at Earl's-court.

Naval Appointments. — Surgeon Thomas Nelson, M.D. (1849), serving in the Cygnet sloop on the West Coast of Africa station, is appointed to the Penelope, flag-ship, on that station; Surgeon H. H. Turnbull to the Vestal; Assistant-Surgeons Culhane to the Vulcan; Henry Loney to the Vestal.

Addenbrooke's Hospital, Cambridge.—Mr. Edmund Carver has been elected to the office of House-apothecary at the above Institution.

Staffordshire General Infirmary.—Mr. William Webb, of Queen's College, Birmingham, has been elected House-surgeon and Secretary to the above Institution.

Middlesex Hospital School of Medicine.—The distribution of prizes at this Institution took place on Thursday, June 17, 1852, the Right Hon. the Earl of Carlisle in the chair. There were present—Lord Bayning, the Countess of Airlie, Sir R. H. Inglis, Bart., M.P., Sir Robert Ainslie, Bart., Sir Walter Stirling, Bart., General Cabrera, Comte de Moulla; Sir Charles Lyell, F.R.S., the Hon. Admiral W. H. Percy, the Hon. T. W. Percy, the Hon. Misses Waldegrave, the Rev. Temple Frere, Charles Babbage, F.R.S., T. M. Arnott, F.R.S.; William Tooke, F.R.S., William Hawes, Esq., Michael Smith, Esq., Walpole Eyre, Esq., John Pepys, Esq., Thomas Hunt, Esq., etc. etc. The awards were as follow:—Medicine (Dr. Crawford and Dr. Thompson.)—Prize: Mr. Thomas Dixon, Bedford; certificate: Mr. Henry James Ellery, Truro. Surgery (Mr. Shaw).—Prize: Mr. Henry James Ellery, Truro; certificate: Mr. Edward Vernon, London. Physiology (Mr. De Morgan).—Prize: Mr. William Lucy, London; certificates: Mr. Edwin Stephens Collins, Sherborne; Mr. Henry Cooper Rose, Canterbury — equal; Mr. Robert Hall Bakewell, Waltham Abbey. Anatomy (Mr. Moore).—Prize: Mr. Edward Vernon, London; certificate. Mr. George Spicer, Tonbridge Wells. Demonstration (Mr. Nunn).—Prize: Mr. Henry James Ellery, Truro; certificates: Mr. Edward Vernon, London, and Mr. Charles Hemming, Kimbolton. Chemistry (Mr. Taylor and Mr. Heisch).—Prize: Mr. Robert Hall Bakewell, Waltham Abbey; certificate: Mr. Chambre R. C. Vigurs, Truro. Midwifery (Dr. Frere).—Prize: Mr. Thomas Dixon, Bedford; certificates: Mr. Daniel Balding, Barkway, Mr. James C. Copland, London. Materia Medica (Dr. A. P. Stewart).—Prize: Mr. Edward Vernon, London; certificate: Mr. William Lucy, London. Forensic Medicine (Dr. Goodfellow).—Prize: Mr. William Henry Rean, Plymouth, and Mr. Henry James Ellery, Truro—equal; certificate: Mr. William Saville, Wakefield. Botany (Mr. Bentley).—Prize: Mr. Edwin Stephens Collins, Sherborne; certificate: Mr. Edward Vernon, London. Prize in Clinical Medicine.—Mr. Henry James Ellery, Truro. Prize in Pathology (presented by Alexander Henry, Esq., M.P.)—Mr. Robert John Dempster, Brighton. Prize presented by the Treasurers of the Hospital.—Mr. Henry James Ellery, Truro. General Certificates.—Messrs. Josiah Austen, Robert Hall Bakewell, Daniel Balding, James C. Copland, Robert John Dempster, Edward Rawson Denton, Thomas Dixon, Henry James Ellery, Robert Ellery, Nathaniel James Grant, James Hadaway, Charles Hemming, William Lucy, Henry Frederick Marley, Humphrey, Leverington, Maysmore, David Mathias, Henry C. Rose, William Saville, George Spicer, Edward Vernon, Chambre R. C. Vigurs, Lake Young.

The British Association for the Advancement of Science.—It has been arranged, that the meeting of this Association is to commence on the 1st of September, at Belfast, all the different sections assembling under one roof, in the new Queen's College, which, as well as all the public buildings in the town likely to be useful in this great gathering of science, has been placed at the disposal of the Managing Committee. It is said that the influential inhabitants of Belfast are making great preparations for the accommodation and comfort of their visiters.

Surgeon Minter.—The Governor-General of India, in a Council notification, alludes in flattering terms to the services of Surgeon Minter, whose personal exertions, he says, have been commended to him. General Godwin speaks highly of the attention and humanity of Superintending Surgeon Montgomery. Our

military and naval brethren, by and by, may anticipate full justice being done them.

THE MANCHESTER CHARITIES.—The theatrical performances at Manchester, on behalf of the local charities, have realised the sum of 850*l.*, including 100*l.* in donations,—a handsome amount to be derived from such a source.

THE *Constitutionnel*, French newspaper, states, that the Austrian Government has given in its adhesion to the convention proposed by the Sanitary Commission, for reforming the quarantine laws; and it is inferred that the Italian States will follow the example of that Government.

BY letters from Queenstown we learn, that the hospital at Haulbowline is undergoing a complete repair, and we have no doubt that ultimately it will be worthy the first naval port in Ireland.

HEMEL HEMPSTEAD.—The election of a coroner for this district took place on the 7th and 8th of June. The candidates were Mr. Pope, surgeon, and Mr. Day, solicitor. On the day of nomination, the advantages to be gained by electing a medical rather than a legal coroner, were most ably shown by Mr. Pope. By two o'clock on the 8th, that gentleman had a large majority, the voters up to that time being the freeholders of the district. Towards the close of the poll, however, the scale was turned in favour of Mr. Day, by the votes of 130 ticket-holders, having an interest in Boxmoor. The validity of the votes given by these persons has been called in question. This much is certain, by their votes the freeholders of the district have lost the services of one who would have proved a most valuable coroner.

DISEASE IN VEGETABLES.—We learn that a disease, similar in its effects to the potato-blight, has made its appearance among the bean-crops of the kingdom; and is even more rapid and virulent in its destructive effects.

DEATHS *in the Metropolis for the week ending Saturday, June* 19, 1852.

CAUSES OF DEATH.	JUNE 19. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	396	333	170	903	8799
SPECIFIED CAUSES	395	333	170	898	8745
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	150	34	12	196	1971
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	7	21	13	41	433
3. Tubercular Diseases	60	124	5	189	1752
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	45	32	33	110	1083
5. Diseases of the Heart and Blood-vessels	3	19	15	37	308
6. Diseases of the Lungs and of the other Organs of Respiration ...	49	30	25	104	998
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	24	30	11	65	620
8. Diseases of the Kidneys, &c. ...	3	10	7	20	101
9. Childbirth, Diseases of the Uterus	...	12	...	12	90
10. Rheumatism, Diseases of the Bones, Joints, &c.	3	2	1	6	71
11. Diseases of the Skin, Cellular Tissue, &c.	...	...	...	...	9
12. Malformations	5	...	...	5	24
13. Premature Birth and Debility ...	21	2	...	23	223
14. Atrophy	12	...	3	15	179
15. Age	...	...	43	43	408
16. Sudden	1	5	1	7	113
17. Violence, Privation, Cold, and Intemperance	12	12	1	25	362
CAUSES NOT SPECIFIED	1	...	...	5	54

TO CORRESPONDENTS.

In consequence of the copious Index which we publish this week, and our desire to include in our present Volume some of the papers contained in this Number of our Journal, our customary "Leading Articles" are omitted. The great value of the Index to those referring to the "Medical Times and Gazette" renders any apology unnecessary. The following Articles are in type:—Notes on some of the more unusual Terminations of Scarlet Fever. By ALEXANDER WOOD, M.D.—Report of a Case of Farcinomatous Inflammation of the Left Foot successfully Treated with the Sesquicarbonate of Ammonia in Frequent and Concentrated Doses. By F. W. MACKENZIE, M.D.—On the Blood-vessels and Trabeculæ of the Spleen *(Illustrated.)* By W. OLIVER CHALK, Esq.—A Sketch of the Medical History of the 47th Regiment. By GEO. SAUNDERS, Esq.—Case of Wound of the Femoral Artery with a Chisel, with Ligature of the Vessel. By R. MASON, Esq.—Illustrations of Clinical Medicine and Pathology. By Drs. BURROWS and KIRKES.—On the Precipitation of Albumen by Acids and Neutral Salts. By E. A. PARKES, M.D.—Correspondence on Professional Etiquette between Mr. Close and Dr. Aikenhead.—On Homœopathy.—On the Treatment of Measles, etc., etc. We would gladly have inserted several of these Communications, but for the reason alluded to above.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you allow me a space in your Journal to make a few remarks on the probable effect the gold mania will have on the medical profession; and, having been out in the colonies in charge of emigrants under the Government plan, to offer a few words of advice to such of my medical brethren who think of trying their fortune at the diggings. When we consider the number of ships that will leave weekly our ports for the next two or three years, and each carrying qualified surgeons, it must be very evident, that it will clear off a vast number from our over-stocked body, and will do much good to those who remain, especially to that ill-paid class of men, qualified assistants; and, by the advertisements which are weekly taking place, they are already becoming scarce. And let me ask, who would remain an assistant when he can make his £100 a-week by digging gold (?) However, knowing what it is to be an assistant, I think the time has arrived when they have a right to demand what is right for their labour, and I think that no one holding a single diploma should accept a situation under £50 per annum, and, with the double qualification, £70 or £80. It is all very well for practitioners to say, they can't afford it, but I know better, and there is this alternative only. Unless they pay this sum, the assistants will be either taking out emigrants, or flocking to the diggings. A few words, now, to those who think of going out in some of these emigrant ships,—those who consider it a sinecure will be very much mistaken; and I do hope, that none will be found who will do themselves and their fellow-surgeons the injustice to give their services for merely a passage, when they have the power in their own hands of being properly and fairly remunerated. I would, therefore, recommend, that none go out for less than £100 for the voyage, or 10s. per head for each emigrant. This is, I consider a fair remuneration, and what, from the present increase of the rate of freights, can be fairly paid. Most probably, nearly all the surgeons who are going out will remain in the country, and will, no doubt, from the increase of population, find employment and plenty. Knowing as I do, from experience, the state of the country, it seems as if Providence had especially ordained the colonies as a resource for our superfluous population, many of whom, not merely among the lower classes here, are barely getting a living. There they will find plenty of all the necessaries of life for a moderate exertion. I am not an advocate for monopoly or combination; but it is notorious, that hitherto no class of men have been so ill paid as qualified men as assistants, or giving their services to merchant-ships. The time has now arrived when they have it in their power to demand a fair and just return for their outlay, and those who fail to take advantage of it, deserve to be treated with that contempt which is the sure consequence of all who hold their services too cheap. I am, &c.

M.R.C.S. and L.S.A.
AND LATE SURGEON-SUPERINTENDENT OF EMIGRANTS.

Mr. Lowe, of Congleton.—The paper will appear without delay, and we shall be glad to receive more communications.

Mr. Spence Bate's papers will be continued.

Philo-Chirurgus.—We have referred the question to a competent authority.

Maidstone.—Sumbul has been strongly recommended as a remedial agent in the treatment of epilepsy, and some cases that have been brought under our own notice speak in its favour. We believe Messrs. Savory are the great importers of the new drug. It is said to be a nervine tonic.

COMMUNICATIONS have been received from—

Dr. ROE, of Plymouth; A SURGEON; Mr. POCOCK, of Brixton; Mr. SPENCE BATE, of Swansea; A HATER OF ALL SORTS OF QUACKERY; Mr. LOWE, of Congleton; Dr. LOCKHART ROBERTSON, of Cambridge; Mr. BEALE, of the Harrow-road; Mr. STARTIN, of Savile-row; X. Y. Z.; Dr. MARKHAM, of St. Mary's Hospital and Clarges-street; A COUNTY SUPERINTENDENT; Mr. LUDLOW, of Paternoster-row; Professor QUAIN, of University College and Cavendish-square; Dr. TAYLOR, of Guildford-street; Mr. BOON HAYES, of Sydenham College, Birmingham; A FOUR YEARS' SUBSCRIBER; Mr. GEORGE, of Hornton-villa, Kensington; Mr. DANIELL, of Newport Pagnell; Dr. KING CHAMBERS of St. Mary's Hospital and Hill-street.

INDEX.

A

Abbot's Grange, Chester, private lunatic asylums, 19
Aberdeen, Marischal College and University, 436
Abnormity, muscular, 47
..... of the bladder, 255
..... of the kidney, 326
Abolition of concours, 348
Abortions, 402
Abscess of the Liver, 15
....., hydatid, 172
Absorption of insoluble substances, 270
Academy, the Royal, 25, 50, 202
..... of Sciences, Paris, 124, 278, 399, 506, 553
Accoucheurs, board of, 604
Acid, hippuric, 176
....., hydrocyanic, in affections of the eye, 185, 367, 439
..... in the lungs, 270
....., prussic, in ophthalmia, 247
....., sulphuric, in diarrhœa, 31, 92, 138, 375, 528
....., tannic, 603
Act, Dispensary (Ireland), 135
....., Metropolitan Interments, 51
....., Sale of Arsenic, 333
....., the Lunacy, 605
....., prosecution under, 307
..... proposed Militia, 191
Acupuncture in sciatica and neuralgia, 85
Acute disease, hydropathy as applied to, 323
..... retinitis, 559
Adams, John, Esq., on the weeping leg, (eczema rubrum,) 60
Addenbrooke's hospital, Cambridge, 643
Administration of chloroform, on the, 474
..... in public hospitals, 345, 349
Adult, croup in, 263
Adventitious products in the choroid plexuses of the horse, 297
Advertisements, quacks and their, 51
Africa, the war in, 355
Agency, patent, 556
Agents, exciting, of epidemic, endemic, and infectious diseases, on the unity of the laws which govern the, 47, 62
Akkrah and Adampe, West Africa, ethnography of, 227
Albert-park, new metropolitan, 332
Albumen and arsenic, 475
Albuminous urine, 166
Albuminuria, 351
..... and its treatment, 38
Alleged case of poisoning, 71
Aloes, quassia, and foreign hops, 407
Amaurosis, neuralgic, 278
Amount of urea in urine, 226
Amphibia, on the impregnation of the ovum in, 20
Amputation at the shoulder-joint, 619
Amputation of the thigh, 161
An o'er true tale, 41
Anatomy and physiology, annals of, 525
..... of the arteries, descriptive and surgical, 166
....., pathological, 50
....., physiology, and surgery, 135
Anencephalous fœtus, cranial bones of the, 488
Aneurism, 94, 566
....., novel treatment of, 255
..... of the aorta, 97, 136
..... heart, 369
....., popliteal, 352
Animal food, 553
..... heat, influence of the sympathetic nervous system on, 506
..... magnetism, a history of magic, witchcraft, and, 217
Annals of anatomy and physiology, 525
Annan, Robert, Esq., compound fracture of the cranium in a boy, 318
Anniversary meeting of the Pathological Society of London, 49
Annual mortality, statistics of, for 1851, 77

ANSWERS TO CORRESPONDENTS:—
26, 52, 79, 100, 126, 152, 178, 204, 230, 256, 280, 308, 334, 356, 382, 408, 482, 508, 556, 582, 606, 632, 644
Antimony, 603
Anus, case of artificial, 364
Aorta, aneurism of the, 97, 136
....., concretion in the, 121
Aortic valves, malformation of the, 95
Apothecaries' Hall, 25, 50, 98, 124, 149, 176, 202, 227, 279, 305, 331, 354, 380, 406, 456, 480, 506, 531, 554, 604, 631, 643
....., the first, 51
..... licence, the, 569
..... prosecution by the Society of, 228
Apothecary, transportation of an, 395, 404
Apparatus for the reduction of dislocations, 553
Appendix vermiformis, ulceration of the, 629
Appointment in India, 202
....., yeomanry, 189
Appointments, 331
..... and vacancies, medical, 124, 149, 176, 202, 254, 280, 305, 331, 354, 381, 407, 431, 456, 507, 531, 554, 632
....., collegiate, 631
....., military, 25, 50, 75, 125, 149, 176, 202, 254, 279, 305, 331, 354, 380, 407, 431, 456, 507, 532, 555, 580, 631
....., militia, 407, 507, 604
....., naval, 50, 75, 99, 125, 149, 176, 202, 228, 254, 279, 305, 331, 407, 456, 480, 507, 580, 604, 631, 632, 643
....., valuable public, 418
Arachnitis, case of acute, 587
Archæology, British, 99
Arctic expedition, the, 202
....., Captain Beatson's, 228
Arcus senilis, 122
Arethusa, the, 228
....., small-pox in the, 230
Armitage, T. R., M.B., hydropathy as applied to acute disease, 323
Army medical department, 125
Arsenic, 603
....., albumen and, 475
....., large doses of, 139, 170, 248
....., poisoning by, 93
Arterial system, injuries of the, 563
Arteries, descriptive and surgical anatomy of the, 166
....., obstruction of the pulmonary, 161
Artery, ligature of the external iliac and superficial femoral, 465, 530
Articles, editorial, 18, 39, 67, 87, 110, 132, 163, 189, 216, 244, 264, 293, 321, 345, 370, 395, 418, 441, 467, 493, 522, 549, 567, 589, 620
Artificial anus, case of, 364
..... deformity of the cranium, 400
..... pupil, observations on, 11, 33
..... teeth, mode of fixing, 170
...., supporting, 107
Asbestos filter, the, 307
Ash, berries of the mountain, 348
Ashmolean Society, the, 178, 226
Asiatic Society, Royal, 25
Asphyxia, 353
Assistant-surgeons, the naval, 67, 89, 133, 164, 331, 396
Association, proposed medico-ethical, 164
....., the British, 643
....., the Provincial Medical and Surgical, 605
Asthma and consumption, infirmary for, 507
Asylum, Colney Hatch, 280, 296
....., Deaf and Dumb, 228
....., Devon County Lunatic, 125
..... for Idiots, 306
Asylums, county lunatic, superintendents of, 600, 642
....., private lunatic, 19
....., State, for criminal lunatics, 332
Attack, judicial, on the profession, 51

B

Bachoffner's, Dr., new fire, 501
....., fire without coal, 355
Balfour, Professor, 474
Ball and socket swing for fractures of the leg, 403, 428, 498, 597, 625
Balman, Thos., M.D., researches and observations on scrofulous disease of the external lymphatic glands, 296
Barclay, Dr., hospital reports, 38, 131, 565

Barlow, Wm. Fred., some general observations on fatty degeneration, 490, 585
Bate, C. Spence, Esq., contributions to dental surgery, 560
Bath, the military order of the, 590
Baths and washhouses, public, 26, 51, 151
Battery, galvanic, and belt, 23
Beale, Lionel, S. M.B., hospital reports, 291
Beasley, Henry, the druggists' general receipt book, 270
Beatson's, Captain, Arctic expedition, 223
Beck, T. Snow, M.D., F.R.S., on the meaning of the term "Ulceration," as at present applied to uterine diseases, 545
Bedford, Mr., practical cases, 83
Beer, bitter, 294, 346, 372, 376, 402, 469, 570, 576
Belcombe, H. S., M.D., cases of sciatica and neuralgia, successfully treated by acupuncture, 85
Belgium, remarks on the climate and the principal diseases of, 324
Bell, Sir Chas., the hand, its mechanism and vital endowments, as evincing design, 443
....., the late Sir C., 306
Belt, galvanic battery and, 23
Benevolent College, Medical, 25, 93, 228, 306, 396, 407, 456, 481, 507, 527, 581, 625
..... Fund, Medical, 48, 254, 531, 555
Bengal, vaccination in, 630
Bequests, 25, 99, 149, 280, 451, 526
Berard, M., 298
Berkshire Hospital, the Royal, 17, 262
Bernard, Ralph M., Esq., case of nævus of the eyelid, 318
Bernays, Albert J., F.C.S., household chemistry, 218
Berries of the mountain ash, 348
Bethlem Hospital, 480, 494, 500, 529, 549, 599, 626
Bill, the Extramural Sepulture, 371
..... Interments, 76
..... Metropolitan Interments, 555
..... Militia, 581
..... New Medical Reform, 191
..... Pharmacy, 273, 295, 352, 347, 376, 442, 481
..... New Pharmacy, 245, 349
..... Proposed Reform, 110
Biologie, Société de, 99
Bird, Frederic, M.D., reports of practice illustrative of the diagnosis, treatment, and pathology of ovarian tumours, 235
Birkenhead troop ship, the loss of the, 372, 397, 401
Birkett, E. Lloyd, M.D., Thomson's Conspectus of the British Pharmacopœia, 135
Birmingham Philosophical Institution, 99
....., Queen's College, 99, 407
..... Hospital, 507
Births, extraordinary, 255
Bishop, John, F.R.S., researches into the pathology and treatment of deformities in the human body, 471
Bite, gangrenous thecal inflammation of the hand from a, 463
Bitter beer, 294, 346, 372, 376, 402, 469, 570, 576
Bladder, abnormity of the, 255
..... and prostrate gland, diseases of the, 267
..... calculus of the, 449
....., paralysis of the, 328
....., stone in the, 17
Blakiston, Peyton, M.D., on diseases of the chest supervening on accidents and operations, 156
Blenheim-street Free Dispensary, 581
Blood, gas in the, 375
..... of the splenic vein, the, 167, 193
....., purulent infection of the, 401
.....-letting in congestion and inflammation, 174
Bloomerism, lunatic, 151
Board of Accoucheurs, 604
..... Guardians, Morpeth, 481
..... Health, the, 202
..... and yellow fever, 311, 540, 567, 572, 599
..... Midwifery, the New, 622
Body, deformities in the human, 471
....., foreign, in the larynx, 252
Bombay, 532
....., sickness and mortality of troops at, 506
Bone, cases of diseased, 158, 213
....., on resection of, 8
Bony tumour of the uterus, 629
Bottle, single-tubed feeding, 224
Bougie, the uterine sound or, 209
Bowels, constipation of the, 301
Bowman, Wm., Esq., canula-scissors for the eye, 108
....., observations on artificial pupil, 11, 33
Brachial plexus, neuralgia of the, 45
Brain, softening of the, 197, 454
Brande, Mr., 202
....., Professor, 381
Brazil, sketches of, 269
Breast, retraction or depression of the nipple of the, in women, 349
Breech presentation, 427
Bright's disease of the kidney, 164, 297, 357, 457
....., microscopic characters of the urine in, 289
British archæology, 99
British Association, the 643
..... embassy, the, 305
..... Guiana, 66
..... Medical Fund, the, 125, 149, 377, 592
Brodhurst, B. E., Esq., an instance of remarkable malformation and deficiency of the genital organs in the female, 187
Brodie, Sir B., physiological researches, 134
Brodribb, W. P., homœopathy unveiled, 524
Brompton Hospital, 507
Bronchocele, fluid, 105
..... iodine in, 37
Bronchophony, the mechanism of, 460, 636
Brooks, the late Joshua, 150
Brown, John D., M.D., case of acute arachnitis induced upon chronic disease of the brain, 387
Bryson, A., M.D., on the propagation of yellow fever by contagion, 640
Bucknill, J. E., M.B., on the classification and management of criminal lunatics, 113
Budd, Geo., M.D., F.R.S., on diseases of the liver, 570
..... Wm., M.D., on the treatment of croup by warm vapour and emetics, 611
Bulley, F. A., Esq., hospital reports, 17, 262
Burgess, T. H., M.D., climate of Italy in relation to pulmonary consumption, 525
Burmese campaign, the, 621
..... war, the, 581
Burnett, Sir Wm., 443
Bursa, 319
..... inflamed, 55
Burying-places, intramural, 443
Bushnan, J. S., M.D., homœopathy and the homœopaths, 524
Bye-laws of the Royal College of Surgeons, 570

C.

Calculi, 596
....., a field-bean the nucleus of, 198
....., causes of, 501
....., cystic oxide, 198
....., formation of, 47, 92
....., remarks on, 272
Calculus of the bladder, 449
Cambridge, Addenbrooke's Hospital, 643
....., medical fellowships, 274
..... University of, 28, 305, 455, 604
Campaign, the Burmese, 621
Cancer, 4, 615
..... of the lungs, 21
..... posterior mediastinum, 137
..... stomach, 353
..... Hospital, the, 494, 568
Cancerous tumour, 250
Cannabis indica in traumatic tetanus, 450
....., poisoning by, 137
Cantharides, poisoning by, 255
Canton, Edwin, F.R.C.S., the oration delivered before the Medical Society of London, 596
Canula scissors for the eye, 108
Captain Beatson's arctic expedition, 223
Capture of Lagos, 604
Carcinomatous ulcer, 27
Carey-street public dispensary, 548
Carpenter, Mr. Richard, death of, 604
Carr, Alfred, M.D., gangrenous thecal inflammation of the hand from a bite, 463
Case of acute arachnitis, 387
..... retinitis, 559
....., amputation of the thigh, 161
..... artificial anus, 364
..... constipation of the bowels, 301
..... dislocation, 162
..... epispadias, 224
..... gestation, a remarkable, 104
..... gestation, Dr. Foley's, 248
..... inversion of the uterus after parturition, 378
..... nævus of the eyelid, 318
..... Mr. Pascoe, 418, 421, 444, 481, 589
..... poisoning, alleged, 71
..... poisoning by cannabis indica, 137
..... severe injury to the head, 131
Cases in ophthalmic practice, 159
..... in surgery, 391
Cases of aneurism treated by pressure, 566
..... diseased bone, 158, 213
..... recovery after fracture of the base of the skull, 238
Cases, practical, 83
....., remarkable, of gestation, 228
Cause of menstruation, final, 219, 325
Causes of calculi, 501
Caustic to the glottis, 274
Cavalry, West Riding yeomanry, 254
Cedron, simaba, and its preparations, in gout, 364
Certificates of lunacy, 119
Cervical vertebræ, dislocation of the, 188
Chair of hygiene, France, 298
..... surgery, Ireland, 155
Chairs, old, to sell, 347
Chapman, Henry T., Esq. Observations on the local treatment of ulcers of the leg, 129, 153, 315, 388
Chapters on mental physiology, 595
Charge against a union surgeon, 52
Charité, Hospital la, 416
Charité, Hospital la, the practice of medicine and surgery at, 263
Charities, Medical, 109, 632
....., the Manchester, 644
Charity for hospital purposes, 177, 228, 254, 280, 332, 351, 407, 480, 507, 532, 605
....., statistics of the Royal Maternity, 447
Charter of the College of Surgeons, 112, 133, 441
..... Physicians, the new, 419, 449, 475, 528, 529, 578, 643
Cheap physic, 324
Chemical Society Reports, 97, 176, 278, 603
Chemistry, Household, 218
..... Physiological, 42, 69
Chemists, Pharmaceutical, 189
Chest, City of London Hospital for Diseases of the, 228, 332
....., diseases of the, 156, 443
....., fungoid tumour of the, 215
....., on the occurrence of expansion of the, in the course of pneumonia, 355
Childhood and infancy, diseases of, 135
Child-poisoning, 382
Children, Hospital for Sick, 177, 507, 523
Childs, G. Borlase, Esq., on the employment of mercury in ordinary cases of syphilis, 62
Chirurgical Society, the Royal Medical and, 76, 124, 132, 140, 177, 228, 279, 407, 456, 577
..... Reports, 94, 140, 248, 274, 302, 328, 378, 450, 503, 551, 601
Chloride of zinc in fistula, 576
Chloroform, administration of, in public hospitals, 345, 349
....., death from, 252, 293, 318, 348
....., on the administration of, 474
....., on the recent death from, 387, 598, 627
Choke-damp, 51
Cholera, the, 332
..... in Oran, 264
Chomel, M., 556
Chorea, 137
"Circular," the "Medical," 93
City of London Hospital for Diseases of the Chest, 228, 332
..... Orthopædic Hospital, 25
Clarke, W. M., Esq., hospital reports, 415
Clavicle, dislocation of the, 415
Cleft palate, 483
Clendon, J. Chitty, Esq., on the recent death from chloroform, 587
Climate and principal diseases of Belgium, remarks on the, 324
..... of Italy in relation to pulmonary consumption, 525
Clinical Lectures, I, 4, 27, 28, 53, 55, 79, 153, 179, 205, 257, 258, 357, 359, 383, 384, 433, 457, 483, 509, 557, 583, 607
Coal, Dr. Bachoffner's fire without, 355
Cod-liver oil, 426
Co-existence of variola and vaccinia, 198
Coiling of the cord, 198
Colchester Medical Society, 407
Coley, James M., M.D., remarks on the climate and the principal diseases of Belgium, 324
College and University, Marischal, Aberdeen, 456
..... Charter, the, 112, 133
..... fellowship, the, 75
..... hospital, 25
..... King's, 480, 507
..... lectures, the 254, 279, 531
..... Medical Benevolent, 25, 93, 177, 228, 280, 306, 396, 456, 481, 507, 527, 581, 625
....., Queen's, Birmingham, 99, 407
....., Trinity, Dublin, 50, 135, 254
....., University, 468, 480
..... and King's, graduates for M.D., 431
..... of Physicians, the Royal, 346, 380, 441, 554, 604
....., the new charter of the Royal, 419, 449, 475, 529, 578, 643
..... Surgeons, the Royal, 50, 75, 98, 124, 176, 201, 254, 279, 305, 354, 380, 406, 431, 456, 479, 531, 554, 604, 631, 643
....., bye-laws of the Royal, 570
....., the new charter of the, 441
..... Ireland, 306
Collegiate appointments, 631
..... election, the, 479
Collett v. Foster, 230
Collins, Wadsworth v., 125
Collodium in internal inflammation, 270
Colney Hatch Asylum, 280, 296
Colon, stricture of the, 302
Colquhoun, J. C., Esq., a history of magic, witchcraft, and animal magnetism, 217
Committee, the graduates', 428
Common lodging-houses, 407
Communications, original, 5, 31, 57, 83, 104, 127, 156, 183, 209, 234, 285, 311, 338, 362, 387, 434, 460, 487, 511, 539, 559, 585, 611, 633
Company's, East India, regulations, 68
Compound fracture of the cranium in a boy, 318
Concours, abolition of, 345
Concretion in the aorta, 121
Conduct of medical officers, gallant, 216

Confinement, solitary, 76
Congenital hydrocephalus, 427
Congestion and inflammation, blood-letting in, 174
Conolly, Dr., testimonial to, 322, 381
Consonance, Skoda's theory of, 373, 642
Conspectus of the British Pharmacopœia, 135
Constipation of the bowels, 301
Consumption and asthma, infirmary for, 507
..... of opium, 281
....., pulmonary, climate of Italy in relation to, 525
Contagion of secondary syphilis, 114
Contributions to dental surgery, 560
Convalescent fund of St. George's Hospital, 555
Conversazione at the Royal College of Physicians, 604
Cooper, Bransby B., Esq., F.R.S., cases of diseased bone, 158, 213
....., clinical lecture on surgery, 55, 383, 509, 609
....., White, Esq., F.R.C.S., cases in ophthalmic practice, 159
Coote, Holmes, Esq., on the cranial bones of the anencephalous fœtus, 488
Corbett, J. H., M.D., the descriptive and surgical anatomy of the arteries, &c., 166
Cord, coiling of the, 198
Cornea, iron spiculæ in the, 428
Coroner, office of, in Jamaica, 151
Coroners' expenses, 255
Correspondence, foreign and provincial, 29, 70, 135, 167, 246, 271, 298, 324, 348, 399, 421, 473, 526, 550, 623
..... from France, 216, 348, 298, 399
..... India, 167
..... Ireland, 135, 421, 550
..... Scotland, 20, 70, 246, 349, 400, 473, 526, 623
....., general, 45, 71, 91, 115, 135, 169, 194, 218, 247, 272, 298, 324, 349, 375, 401, 421, 444, 474, 498, 527, 572, 596, 624
Correspondents, answers to, 26, 52, 79, 100, 126, 152, 178, 204, 230, 256, 280, 308, 334, 356, 382, 108, 482, 508, 556, 582, 606, 632, 644
Cottle, John Morfold, manual of human physiology for students, &c., 622
Coulson, Wm., on the diseases of the bladder and prostate gland, 267
Councillors, new, 631, 643
Country practitioners and the Horse-tax, 223
County Court decision, an important, 502
..... Lunatic Asylum, Devon, 125
..... Asylums, Superintendents of, 600, 642
Court martial, a, 26
..... of Aldermen, medical fees and the, 280
Crampton, Sir Philip, 125
Cranial bones of the anencephalous fœtus, 488
Cranium, artificial deformity of the, 100
....., compound fracture of the, in a boy, 318
Cretinism and goitre, 278
Crime, extraordinary, 203
Criminal lunatics, 113
Croup in adult, 263
....., treatment of, 611
Crystals, dumb-bell, 300
Cumming, Mrs., 356
Curling, T. B., Esq., cases of malformation of the female sexual organs, 84
Curvature of the spine, 471
Cutaneous diseases, starch in, 525
Cutting instrument, a simple, 270
Cyst on the scalp, 528
Cystic oxide calculi, 198
..... tumour of the ovary, 146
Cysts, subcutaneous, 201

D

Dalrymple, the late Mr., 471
Davenport, J. W., the mirror of dentistry, 218
Davey, Dr., and mesmerism, 87
Davies, Herbert, M.D., lectures on the physical diagnosis of the diseases of the lungs and heart, 90
Dead-houses in Prussia, 333
Deaf and dumb asylum, 228
Deakin, Hayes r., 481
Death from chloroform, 253, 293, 318, 348, 587, 598, 627
..... from improper medicine, 382
..... of Mr. R. Carpenter, 604
..... Dr. Spittal, 401
..... Dr. Wm. Thomson, 526
..... Sir A. M. Downie, M.D., 176
..... Sir C. F. Forbes, 355
..... the mother, parturition after, 45
....., the march of, in St. Giles's, 73
....., the medical aspects of, 91
Decision, important, 331
Deformities in the human body, 471
Deformity, artificial, of the cranium, 400
Degeneration, fatty, 48, 429, 490, 585
Deligation of the external iliac, 393
Delivery, easy, 503, 166
Demerara, yellow fever in, 298
Denmark, 605
Dental surgery, 560
Dentistry, the mirror of, 218
Deposits, fibrinous, 503, 601
....., secondary, 565
Descriptive and surgical anatomy of the arteries, 166
Deville, M., 151
Devon and Exeter hospital, practice of medical surgery at, 393
..... county lunatic asylum, 125
Diagnosis and pathology of renal diseases, lectures on the, 283, 335, 409, 533
....., treatment, and pathology of ovarian tumours, reports of practice illustrative of the, 235
Diarrhœa, sulphuric acid in, 31, 92, 138, 375, 528
Diary and Journal for 1852, Medical, 20
Dictionary for the People, Medical, 498
Difficulties in lithotomy, 58
....., the Stomach and its, 297
Digestion, respiration, and secretion, lectures on, 5, 101, 309
Diggings, the gold, 524
Directory, the London and Provincial Medical, 296
Disease, Bright's, 164, 357, 457
....., acute, hydropathy as applied to, 323
..... in vegetables, 644
..... of heart, 476
..... hip-joint, 261
..... the kidney, Bright's, 297
....., encephaloid, 50
..... larynx, 65, 521
..... uterus, 98
....., scrofulous, 296
....., tubercular, 148
Diseased bone, cases of, 158, 213
Diseases, cutaneous, starch in, 525
....., lectures on the pathology and diagnosis of renal, 283, 335, 409, 533
..... of infancy and childhood, 135
..... the bladder and prostate gland, on the, By W. Coulson, 267
..... chest, 156, 443
....., City of London Hospital for, 223, 332
..... ear, practical observations on, 313, 437, 487
....., Royal Dispensary for, 150
..... heart, 398
..... liver, 570
..... lungs and heart, 90
..... rectum, 28, 79, 153
..... skin, gutta percha in, 508
..... on the unity of the laws which govern the exciting causes of epidemic, endemic, and infectious, 47, 62
....., uterine, 545
....., and their treatment, 424
Dislocation, case of, 162
..... of the cervical vertebræ, 188
..... clavicle, 415
Dislocations, apparatus for the reduction of, 553
Dispensary Act (Ireland), 135
....., Blenheim-street Free, 581
....., Exeter, 292
....., North Pancras Provident, 150
....., Oxford Medical, 432
....., Public, Carey-street, 548
....., Western, 605
..... for Diseases of the Ear, 150
Dispensatory, the London, 623
Diuretic, urea as a, 464
Doses, large, of arsenic, 139, 248
Double flap operation, 86
..... hare-lip, 188
Downie, Sir A. M., M.D., death of, 176
Downing, C. Toogood, M.D., neuralgia, its various forms, pathology, and treatment, 44
Dreadnought Hospital-ship, 443
Dropsy, operation for ovarian, 530
....., ovarian, 630
Druggists' General Receipt Book, the, 270
Drugs for the merchant shipping, 229
Dublin hospitals, the, 177, 306
....., Pathological Society of, 135, 550
....., Trinity College, 50, 135, 254
....., University of, 554
Dumb Asylum, Deaf and, 228
.....-bell crystals, 300
Dumbness after typhus fever, 462
Dundas, Robert, M.D, sketches of Brazil, &c., 269
Durham, University of, 162
Dysentery, 22
....., tropical, 167
Dysmenorrhœa, by Edward Rigby, M.D., 127, 195, 285, 539
Dyson v. Dyson, 229

E

Ear, diseases of the, 313, 437, 487
....., Dispensary for Diseases of the, 150
....., on the treatment of polypi of the, 14, 105, 212, 343
East India Company's regulations, 68
..... Service, medical appointments in the, 568
Easy delivery, 166
Eclipse, an invisible, rendered sensible, 400
Eczema rubrum, 60
Edinburgh, 26
..... Medico-Chirurgical Society, 247
....., mesmerism in, 246
" ..... Monthly Journal," the, 164
....., old houses in, 349
..... quarrel, the latest, 493, 527
..... Royal Medical Society, 349

EDITORIAL ARTICLES:
13, 39, 67, 87, 110, 132, 163, 189, 216, 244, 264, 293, 321, 345, 370, 395, 418, 441, 467, 493, 522, 549, 567, 589, 620
Effects of Indian hemp, 273
..... stramonium, 197
..... produced by certain medicines, examinations of the, 362
Effusion, pleurisy, paracentesis thoracis, 106
Egesta, uterine, 377
Election, the Collegiate, 479
..... general, 396
..... Greenwich, 164
Electrotype, 51
Elephantiasis græcorum, 291
Elimination of certain poisons, on the, 279
Embassy, the British, 305
Emigrant ships, ventilation of, 255
Emphysema, pulmonary, 400
Empyema from injury, 269
....., encysted, pathology of one form of, 637
Encephaloid disease of the kidney, 50
Encysted empyema, pathology of one form of, 637
Endemic, epidemic, and infectious diseases, on the unity of the laws which govern the exciting agents of, 47, 62
Endocarditis, the endocardium and, 374
Endocardium, the, and endocarditis, 374
England, vaccination in, 375
Enlargement of the head, 173
Entomological Society, 26
....., reports, 175
Entropium, 515, 576
Epidemic, endemic, and infectious diseases, on the unity of the laws which govern the exciting agents of, 47, 62
Epidemics, progress of, 76, 280, 307, 332, 381, 432, 532, 556, 606
Epidemiological Society, 30, 150, 255, 407, 477, 481, 630
Epilepsy, 530
Epispadias, case of, 224
Eruptive fevers, 290
Erysipelatous affection of the throat, 557
Erythema nodosum, 56
Esdaile, Dr., 400
Esquimaux, parturition among the, 473
Estimates, navy medical and scientific, 255
Ethics, medical, 45, 69, 196
Ethnography of Akkrah and Adampe, West Africa, 227
Ethnological Society, 76, 227
Etiology of phthisis, 186, 237
Etiquette, Medical, 377
Europe, the vegetation of, 443
Examinations, fellowship, 380
..... of the effects produced by certain medicines, 362
Excision of joints, on, 74, 287, 434, 518
Exeter Dispensary, 292
Expansion of the chest in the course of pneumonia, on the occurrence of, 338
Expedition, the Arctic, 202
....., Captain Beatson's Arctic, 223
Expenses, coroners', 255
Extramural Interments, 574, 599
..... Sepulture Bill, the, 371
Extraordinary births, 255
..... crime, 203
Extra-urbem licentiates, the, 620, 643
Eye, canula-scissors for the, 108
....., hydrocyanic acid in affections of the, 183, 367, 439
Eyelid, case of nævus of the, 318
Eyre, Sir James, M.D., the Stomach and its Difficulties, 297

F

Fallacies of homœopathy, on the, 323
Fasting, 51
Fatty degeneration, 48, 429, 490, 585
Fearnside, H., M.B., on the occurrence of expansion of the chest in the course of pneumonia, 338
Feeding bottle, single-tubed, 221
Fees, medical, by railway, 100
..... to medical men, 381
..... witnesses, 605
Fellowship, the College, 75, 98, 354, 450, 631
..... examinations, 380
Female organs, malformation of the, 136
....., remarkable malformation in the, 187
Femoral hernia, 353
Femur, fracture of the, 28
Fergusson, W. Esq., F.R.S., clinical lectures, 438
..... lecture on stricture of the urethra and perineal section, 258
....., on resection of the bone, 3

Fever, on, 179
....., Hospital, London, 203
....., intermittent, 167
....., salt in intermittent, 194
....., scarlet, 151, 632
....., typhoid, 455
....., typhus, dumbness after, 462
....., yellow, 147, 511, 540, 567, 572, 599
....., in Demerara, 298
....., on the propagation of, by contagion, 640
Fevers, 290
....., eruptive, 290
....., typhus and typhoid, 324
Fibrinous deposits, 503, 601
..... tumour of the labium, 242
Field-bean, a, the nucleus of calculi, 198
Filter, the asbestos, 307
Final cause of menstruation, 219, 325
Findlay, Dr., 381
Fire without coal, Dr. Bachoffner's, 355, 501
Fistula, chloride of zinc in, 576
Fixing artificial teeth, mode of, 170
Flower, Mr., 605
Fluid bronchocele. 105
Foley, Wm., M.D., on dumbness after typhus fever, 462
....., remarkable case of gestation, 104, 169, 248
Food, animal, 553
Forbes, Sir C. F., M.D., 381
....., death of, 355

FOREIGN AND PROVINCIAL CORRESPONDENCE:—
20, 70, 135, 167, 246, 271, 298, 324, 348, 399, 421, 473, 526, 550, 623
Foreign bodies in the stomach, 94
..... body in the larynx, 252
Formation of calculi, 47, 92
Foster, Collett v., 230
Fracture of the base of the skull, cases of recovery after, 238
..... cranium in a boy, compound, 318
..... femur, 28
..... neck of the humerus, 247
Fractures of the leg, new ball and socket swing for, 403, 428, 498, 597, 625
France, Academy of Sciences, 399
....., chair of hygiene, 298
....., correspondence from, 246, 298, 348, 399
....., University of, 280
Franchise, science and the, 189
Franklin, Sir John, 51
Frerichs, Dr. F. T., Bright's kidney disease and its treatment, 164
Fuller, Dr. H. W., on sulphuric acid in diarrhœa, 31
Fund, British Medical, 125, 149, 377, 592
....., Medical Benevolent, 48, 254, 531, 555
Fungoid tumour of the chest, 215
Future, our, 18

G
Gairdner, T., M.D., on homœopathic hospital statistics, 340
Gallant conduct of medical officers, 216
Gallwey, M. Broke, Esq., illustrations of unhealthy inflammation, 615
Galvanic battery and belt, 23
Galvanism, 529
....., new application of, 407
Gamgee, Mr. John, adventitious products in the choroid plexuses of the horse, 297
....., prize essay on the descriptive anatomy of the abdominal viscera of the horse, 297
Gangrene, 205
..... of the lung, 578
Gangrenous thecal inflammation of the hand from a bite, 463
Gas in the blood, 375
....., natural, 26, 51
....., water, 51
Gastrotomy, statistics of, 72
General Board of Health, the, 202

GENERAL CORRESPONDENCE:
45, 71, 91, 115, 135, 169, 194, 218, 247, 272, 298, 324, 349, 375, 401, 421, 444, 474, 498, 527, 572, 596, 624, 641
General election, the, 396
..... Hospital, Bristol, 415
..... Infirmary, Staffordshire, 643
Genital malformation, 252
Geological Society, 25, 605
Geology, Museum of Practical, 25
....., the Swiney professorship of, 496
German Hospital, Dalston, 150
Gestation, 169
....., a remarkable case of, 104
....., Dr. Foley's case of, 248
....., prolonged, 223
....., remarkable cases of, 298
Glasgow, chair of the practice of physic in, 526, 623
....., University of, 631
Glottis, caustic to the, 274
Godfrey's cordial, poisoning by, 203
Goitre and cretinism, 278
Gold diggings, the, 524
Gonorrhœa, new method of treating, 365
Goodsir, John, F.R.C.S., annals of anatomy and physiology, 525
Gout, simaba cedron and its preparations in, 364
Graduates' Committee, the, 428
..... for M.D., University and King's College, 431
Grant, Dr., 99
..... testimonial, the, 321
Granville, Dr., 331
Greenwich election, 164
Gregory, Geo., M.D., vaccination tested by the experience of half a century, 633
Gresham lectures, 76
Grove, John, Esq., M.R.C.S., the unity of the laws which govern the exciting causes of epidemic, endemic, and infectious diseases, 47, 62
Guiana, British, 66
Guinea worm, the, 22
Gulstonian lectures, the, 283, 335, 409, 533
Gun cotton, 356
Gutta percha in diseases of the skin, 508
Guy's Hospital, 25, 555
....., practice of medicine and surgery at, 15, 242

H
Hæmorrhage from inversion of the uterus, 551
....., matico in uterine, 642
Hæmospasic apparatus, Junod's, 50
Hall, Apothecaries, 25, 50, 94, 124, 149, 176, 202, 227, 279, 305, 331, 354, 380, 406, 456, 480, 506, 531, 554, 604, 631, 643
....., the first apothecaries', 51
Hand, the, 443
....., grangrenous thecal inflammation of the, from a bite, 463
Harcourt, E. V., Esq., a sketch of Madeira, 134
Hare-lip, double, 188
Harris, John, Esq , hospital reports, 393
Harrison, J. B., the medical aspects of death, and the medical aspects of the human kind, 91
Havers, John, Esq., F.R.C.S., obstruction of the pulmonary arteries, a cause of sudden death after labour, 161
Hayes v. Deakin, 481
Head, enlargement of the, 173
....., injuries of the, 223
....., malignant tumour in the, 128
....., severe injury to the, 131
Health, the board of, 202
....., Swansea officer of, 266
Heart and lungs, diseases of the, 90
....., aneurism of the, 369
....., diseases of the, 398, 476
....., movements of the, 428
....., rupture of the, 95
Hemel Hempstead, 644
Henfrey, Arthur, F.L.S., the vegetation of Europe; its conditions and causes, 443
Hernia, 393
....., femoral, 353
....., strangulated femoral, 262
Hewett, W., Esq , case of dislocation, with fracture of the shoulder-joint, 162
Higgins, Charles Hayes, M.D., on the uterine sound or bougie, 209
Hill v. Philp, 150
Hill-top v. valley-bottom water, 442, 476
Hilton, John, Esq., on double cystiform bronchocele or goitre, cured by injection of iodine, 37
Hinton, Jos., Esq., case of amputation of the thigh, 161
Hip-joint, disease of, 261
Hippuric acid, 176
Histology, lectures on, by John Quekett, 623
History, of magic, witchcraft, and animal magnetism, 217
Holl, Harvey B., Esq., hospital reports, 369
Holland, Henry, M.D., chapters on mental physiology, 595
Home, Inok at, 216, 294, 351, 370, 400, 503, 529
.....-Madeira at Torquay, 591
..... truths for home peace, 399
Homicidal monomania, 270
Homœopathic hospital statistics, 340
Homœopaths, the, 99, 117, 281, 382
....., homœopathy and the, 524
....., our relations with the, 18, 111
Homœopathy, 76, 577
..... and the homœopaths. By J. Stevenson Bushnan, M.D., 524
....., on the fallacies of, 323
....., Sunderland Medical Society, and, 50
..... unveiled. By W. P. Brodribb, 524
Hong-Kong, 228
Honours, medical, 643
"Hope" prizes, the, 125
Hops, foreign, quassia, aloes, and, 407
Horse, adventitious products in the choroid plexuses of the, 297
....., prize essay on the descriptive anatomy of the abdominal viscera of the, 297
Horse-tax, country practitioners and the, 223
Hospital, Addenbrooke's, Cambridge, 643
....., Bethlem, 480, 500, 507, 549, 599, 626
..... Brompton, 507
..... City Orthopædic, 25
....., Devon and Exeter, practice of medicine and surgery at, 393
....., General, Bristol, 415
....., German, Dalston, 150
....., Guy's, 15, 25, 555
....., practice of medicine and surgery at, 242
....., Kent Ophthalmic, 203
....., practice of medicine and surgery at, 620
....., King's College, 25, 76, 99, 280, 555
....., the practice of medicine and surgery at, 65, 215, 261, 291
..... la Charite, the practice of medicine and surgery at, 263, 416
....., London, 480, 507
....., the practice of medicine and surgery at, 86, 319, 547
....., Metropolitan Free, 480, 581
....., Middlesex, School of Medicine, 643
...., the practice of medicine and surgery at, 108, 415
....., New Surgical, 246
..... Purposes, Charity for, 177, 228, 254, 280, 332, 381, 407, 480, 507, 532, 605
....., Queen's, Birmingham, 507

HOSPITAL REPORTS—
Devon and Exeter Hospital:—
Deligation of the external iliac, 393
General Hospital, Bristol:—
Ruptured urethra, 415
Guy's Hospital:—
Abscess of the liver consecutive to dysentery, 15
Fibrous tumour of the labium; enucleation; recovery, 243
Large polypus of the uterus removed by ligature; recovery, 243
Hospital la Charite:—
Croup in an adult female, with expectoration of pseudo-membranous tubular moulds of the trachea; death; autopsy, 263
Profuse blood-letting in acute articular rheumatism, 416
Hotel Dieu:—
Successful treatment of chronic abscess with iodine injections, 320
Kent Ophthalmic Hospital:—
Melanosis of the left eye; extirpation of the globe, 620
King's College Hospital:—
Disease of larynx, rendering the operation of tracheotomy necessary, 65
Fungoid tumour of the chest, 215
Disease of hip-joint, 261
Case of elephantiasis Græcorum, with analysis of the urine, 291
London Hospital:—
The double flap operation, 86
Enlarged bursa over the right and left patella, removed by excision—enlarged bursa connected with the tendon of the semitendinosus; puncture; suppuration of the sac; cure—bursa over the internal malleolus of the right foot; failure of puncture; excision, 319
Extensive necrosis of the right femur; excision of part of the substitute bone; removal of a large sequestrum; recovery, 547
Necrosis of the tibia after fever; excision of substitute bone; removal of the sequestrum at three different periods; recovery, 548
Middlesex Hospital—
Tetanus, 108
Dislocation of the sternal end of the clavicle backwards, 415
Newcastle-on-Tyne Infirmary:—
Cases of aneurism treated by pressure, 566
Royal Berkshire Hospital:—
Stone in the bladder; absence of some of the ordinary symptoms; operation, 17
Strangulated femoral hernia; grangrene of the contained omentum; operation; death; post-mortem examination, 262
St. Bartholomew's Hospital:—
Dislocation of the cervical vertebræ; death; post-mortem examination, 188
The late death from chloroform, 318
On injuries of the arterial system; compound comminuted fracture of the left superior maxillary and malar bones, followed by profuse arterial hæmorrhage from the pterygo-maxillary fossa; small penetrating wound of the forearm piercing the ulnar artery and causing effusion of blood, 563
Penetrating wound of the forearm; puncture of the ulnar artery; punctured wound of the right forearm followed, after the lapse of a week, by profuse arterial hæmorrhage; deligation of the anterior interrosseous artery, 564

Cancer; second relapse; third operation, 618
St. George's Hospital:—
Albuminuria and its treatment, 38
Anæmia, its causes and consequences, 131
Secondary deposits, 565
St. Mary's Hospital:—
Double hare-lip, with fissure of the jaw, 188
Lithotomy, 466
Compound comminuted fracture of the left-arm; amputation at the shoulder-joint; prostration; death in eighteen hours, 619
St. Thomas's Hospital:—
Empyema from injury; death; post-mortem examination, 260
Hernia; sloughing of the intestine; cure, 393
Disease of the larynx; tracheotomy; necrosis of the cricoid cartilage, and abscess between the larynx and œsophagus opening into the œsophagus, 521
York County Hospital:—
Leucocythemia; liver and spleen hypertrophied; aneurismal cavity in the substance of the ventricular septum of the heart; suddenly fatal from rupture into the right auricle, 369
Hospital, Royal Berkshire, 17, 262
.....ship, the Dreadnought, 443
..... statistics, hœmœopathic, 340
..... of the Metropolitan Free, 281
....., St. Bartholomew's, practice of medicine and surgery at, 188, 318, 563, 618
....., St. George's, 42, 50, 507, 555
....., Convalescent Fund of, 555
....., practice of medicine and surgery at, 38, 131, 565
....., St. Mary's, 48, 604
....., the practice of medicine and surgery at, 188, 466, 619
....., St. Thomas's, 306, 605
....., the practice of medicine and surgery at, 260, 393, 521
....., University College, 351
....., York County, 369
..... for Diseases of the Chest, City of London, 228, 332
..... Incurables, Proposed, 119, 203, 255, 331
..... Sick Children, 177, 507, 523
..... Women, 125
....., the Cancer, 494, 568
..... Orthopædic, 432
..... Spinal, 355
Hospitals, administration of chloroform in public, 345, 349
....., asylums, and workhouses, of London, statistics of mortality in, for 1851, 229
....., Dublin, 177, 306
....., liability of, to rating, 581
..... of London, 381
....., the vice of special, 467
Hôtel-Dieu, 320
House of Lords, 202, 332
Household chemistry, 218
Houses, old, in Edinburgh, 319
Human physiology, 622
Humerus, fracture of neck of the, 247
Hunterian Museum, the, 280
..... oration, the, 177
Hutton, G. A., Esq., hospital reports, 566
Hydatid abscess of the liver, 172
Hydatids, 1
Hydrocephalus, congenital, 427
Hydrophobia, 255
Hydrocele, 383, 509, 609
Hydrocyanic acid in affections of the eye, 185, 367, 439
Hydropathy as applied to acute disease, 323
Hydrophobia, 504
Hygiene, chair of, France, 298
Hypertrophy of the spleen, 250

I

Idiocy, 303
Idiots, Asylum for, 306
Iliac, external, deligation of the, 393
Illustrations of unhealthy inflammation, by M. Broke Gallwey, Esq., 615
Important decision, 331
Impregnation of the ovum in the amphibia, on the, by Geo. Newport, F.R.S., 20
Improper medicine, death by, 382
Improvements, London, 26
Income-tax, the, 177, 244, 273, 496
Incurables, proposed Hospital for, 119, 203, 255, 331
India, 151, 203, 436
....., appointment in, 202
....., correspondence from, 167
Indian hemp, effects of, 273
Inflammation, gangrenous thecal, of the hand from a bite, 463
Infancy and childhood, diseases of, 135
Infant, iritis in an, 234
Infantile mortality, 76
Infection of the blood, purulent, 401
Infectious diseases, on the unity of the laws which govern the exciting agents of epidemic, endemic, and, 47, 62
Infirmary for Asthma and Consumption, 507
....., General, Staffordshire, 643
....., Newcastle-on-Tyne, 566
....., Worcester General, 481
Inflammation and congestion, bloodletting in, 174
..... collodium in internal, 270
..... of joints, 583
....., unhealthy, 615
Ingratitude, national, 507
Ingrowing toe-nails, 502
Injections, iodine, 320
Injuries of the arterial system, 563
..... of the head, 223
..... to the spine, 147
Injury, empyema from, 260
..... to the head, case of severe, 131
Inoculation, 218
Inquest at North Walsham, the, 589
Insanity, the plea of, 113, 194
Institution, Birmingham Philosophical, 99
....., Royal, 604
....., the Royal Polytechnic, 25
Institutions, medical provident, 378, 597
....., public, statistics of mortality at, 300, 325, 351
....., training, for nurses, 40, 91
Instrument, a simple cutting, 270
Interment Bill, the, 76, 555
Interments Act, Metropolitan, 51
..... extramural, 574
Intermittent fever, 167
..... salt in, 194
Intermittents, sea-salt in, 374
Intestinal obstruction, 249, 250
Intestine, perforation of the, 455
Intramural burying-places, 443
Inventions and patents, new, 279
Inversion of the uterus, 378
..... hæmorrhage from, 551
Inveterate stricture, 384
Iodine in bronchocele, 37
..... injections, 320
Ireland, College of Surgeons, 306
....., correspondence from, 135, 421, 550
....., Queen's University, 306, 550
Irish murderers, the, 151
Iritis in an infant, 234
Iron spiculæ in the cornea, 428
Irregular teeth, 560
Italy, climate of, in relation to pulmonary consumption, 525

Jacksonian prize, the, 98, 420
Jamaica, 381
....., office of coroner in, 151
Jaw, tumour of the upper, 891
Jenner, monument to, 140, 172
Johnson, George, M.D. Lond., lectures on the pathology and diagnosis of renal diseases, 283, 335, 409, 533
Joints, on excision of, 74, 287, 434, 518
....., scrofulous and rheumatic inflammation of, 583
Jones, C. Handfield, M.B., examinations of the effects produced by certain medicines, 362
....., G. M., Esq., on excision of joints, 74, 287, 434, 518
....., H. Bence, M.D., F.R.S., clinical lecture, 457
..... lectures on digestion, respiration, and secretion
Lecture XVIII.—On albuminous urine, 5
Lecture XIX.—On Diabetes, 101
Lecture XX.—On the alkaline and earthy phosphates, 309
Jones, T. Wharton, F.R.S., on the nature and treatment of pustular ophthalmia, 36
..... on the use and abuse of nitrate of silver drops to the eye, 618
Journal, Medical Diary and, for 1852, 20
" ....." the " Edinburgh Monthly," 164
Journals, selections from, 44, 114, 166, 193, 270, 525
Judicial attack on the Profession, the, 51
Junod's hæmospasic apparatus, 50

K

Kent Ophthalmic Hospital, 203
....., practice of medicine and surgery at, 620
Kidney, abnormity of the, 326
....., a single, 197
....., Bright's disease of the, 297
....., encephaloid disease of the, 50
....., microscopic characters of the urine in Bright's disease of the, 289
....., serous cysts of the, 95
Kincaid, Captain, 78
King's and University College, graduates for M.D., 431
..... College, 480, 507
..... Hospital, 25, 76, 99, 280, 555
....., the practice of medicine and surgery at, 65, 215, 261, 291
Kosmos, the, 26
Kousso for ascarides, 375

L

Labium, fibrous tumour of the, 242
Laceration of the liver, 120
Laing, Dr., 508
Lagos, the capture of, 604
Large doses of arsenic, 139, 170, 248
..... polypus of the uterus removed by ligature, 243
Larynx, diseases of the, 65, 521
....., foreign body in the, 252
....., spasm of, 376
Laudanum, poisoning by, 432
Law of lunacy, 137
Lawrence, Mr., 323
....., W., Esq., F.R.S., clinical lectures on surgery, 4, 27
Laws which govern the exciting agents of epidemic, endemic, and infectious diseases, on the unity of the, 47, 62

LEADERS —
Our future, 13
Our relations with the homœopaths, 13
Private Lunatic Asylum, Abbot's Grange, Chester, 19
Navy victualling and our navy medical officers, 39
Training Institutions for Nurses, 40
An o'er true tale, 41
St. George's Hospital; Medical appointment in the East India Company's Service, 42
The naval assistant-surgeons, 67
The vote by proxy, 68
East India Company's regulations, 68
Medical ethics, 69
Dr. Davey and mesmerism at the Colney Hatch Lunatic Asylum, 87
Naval assistant surgeons, 89
The proposed Reform Bill, 110
Our relations with the homœopaths, 111
Royal Medical and Chirurgical Society, 132
Naval assistant-surgeons, 133
Scientific Members for Parliament, 163
Water supply for the Metropolis, 163
Greenwich election; naval assistant-surgeons, 164
Proposed Medico-ethical Association, 164
The " Edinburgh Monthly Journal," 164
Science and the franchise, 189
Medical statistics, 190
The proposed Militia Act, 191
Look at home, 216
Gallant conduct of medical officers, 216
Poor-law Unions, 217
The Income-tax, 244
The New Pharmacy Bill, 245
Meats preserved in vacuo, 264
The union surgeons, 265
University of London, 266
Swansea officers of health, 266
Medical men in Parliament, 267
Death by chloroform, 293
Bitter beer, 294
Look at home, 294
The speculum question, 295
Pharmacy Bill, 295
Colney Hatch Asylum, 296
The Grant testimonial, 321
Medical men in Parliament, 322
Testimonial to Dr. Conolly, 322
Mr. Lawrence, 323
The administration of chloroform in public hospitals, 345
Bitter beer, 346
The College of Physicians, 346
The Pharmacy Bill, 347
Old chairs to sell! Inquire of the College of Surgeons, 347
The Rotherham trial, 348
Look at home, 370
The Extramural Sepulture Bill, 371
Bitter beer, 372
The " Birkenhead " troop-ship—Gallant conduct of the assistant-surgeon, 372
Transportation of an apothecary, 395
The Medical Benevolent College, 396
The ensuing General Election—Naval assistant-surgeons, 396
The loss of the " Birkenhead," 397
Mr. Paseoe's case, 418
" The souls of the sick," 418
Valuable public appointments, 418
College of Physicians, 441
New charter of the College of Surgeons, 441
The Pharmacy Bill, 442
Hill-top v. valley-bottom water, 442
Unpaid medical officers, 443
The vice of special hospitals, 467
University College, 468
Bitter beer, 469
The late Mr. Dalrymple, 471
The latest Edinburgh quarrel, 493
Bethlem, 494
Cancer Hospital, 495
Income-tax, 496
The Swiney Professorship of Geology, 496
Unpaid medical officers, 522

The Children's Hospital, 523
The gold diggings, 524
Bethlem Hospital, 549
The Board of Health and yellow fever, 567
Distribution of medical appointments in the East India Company's Service, 568
The Cancer Hospital, 568
The Apothecaries' licence, 569
Bitter beer, 570
Bye-laws of the Royal College of Surgeons, 570
The inquest at North Walsham, 589
The case of Mr. Pascoe, 589
The military Order of the Bath and the medical profession, 590
The home-Madeira at Torquay, 591
The British Medical Fund, 592
The extra-urbem licentiates of the College of Physicians, 620
The Burmese campaign, 621
The new Board of Midwifery at the College of Surgeons, 622

Lectures, clinical, 1, 4, 27, 28, 53, 55, 79, 153, 179, 205, 257, 258, 357, 359, 383, 384, 433, 457, 483, 509, 557, 583, 607
..... on digestion, respiration, and secretion, By H. Bence Jones, M.D., F.R.S., 5, 101, 309
..... on histology, 623
..... on the pathology and diagnosis of renal diseases, by Geo. Johnson, M.D., 283, 335, 409, 533
....., original, 1, 27, 53, 79, 101, 153, 179, 205, 231, 257, 283, 309, 335, 357, 383, 409, 433, 457, 483, 509, 533, 557, 583, 607
....., the College, 254, 279, 531
..... Gresham, 76
..... Gulstonian, 283, 335, 409, 533
Lee, Henry, Esq., cases of recovery after fracture of the base of the skull, 238
....., Robert, M.D., 381
Leg, new ball and socket swing for fractures of the, 403, 428, 498, 597, 625
....., observations on the local treatment of ulcers of the, 129, 133, 315, 388
....., the weeping, 60
Lehmann, Professor C. G., physiological chemistry, 42, 69
Leslie and Pennell, Drs., case of artificial anus, 364
Leucocythemia, 369
Levees, Her Majesty's, 254, 331, 432
Liability of hospitals to rating, 581
Licence, the Apothecaries', 569
Licentiates, the extra-urbem, 620, 643
Lichig, M., 51, 632
....., on the respiration of muscles, 44
Life of Dr. John Reid, 420
Ligature, large polypus of the uterus removed by, 243
..... of the external iliac and superficial femoral artery, 465, 530

LIST OF SCIENTIFIC MEETINGS :—
18, 39, 67, 87, 109, 132, 162, 189, 216, 244, 264, 293, 321, 345, 370, 394, 418, 440, 467, 493, 522, 549, 567
Lithates in urine, 47, 93
Lithotomy, 466
....., difficulties in, 58
Liver, abscess of the, 15
....., the, and its secretions, 121
....., diseases of the, 570
....., hydatid abscess of the, 172
....., laceration of the, 120
Liverpool, 17, 51
..... Medical Society, 98, 148, 201
..... and Pathological Society, Reports, 353
..... School of Medicine, 407
Living, the philosophy of, 443
Lodging-houses, common, 407
London and Provincial Medical Directory, 296
..... Dispensatory, the, 623
..... Fever Hospital, 203
..... Hospital, 480, 507
....., the practice of medicine and surgery at, 86, 319, 547
....., hospitals of, 581
..... improvements, 26
....., Medical Society of, 280, 354, 432, 450, 555
....., Reports, 22, 50, 73, 121, 147, 173, 198, 224, 252, 303, 351, 423, 476, 530, 553, 578, 629
..... Necropolis, the, 556
....., Pathological Society of, 202, 305, 381
....., Reports, 21, 48, 95, 120, 146, 172, 197, 250, 454, 581

LONDON PRACTICE OF MEDICINE AND SURGERY, the :—
15, 38, 65, 86, 108, 131, 188, 215, 242, 260, 291, 318, 369, 393, 415, 466, 521, 547, 563, 618
London, University of, 24, 217, 228, 266, 428, 478, 479, 554, 604
..... College and the University of, 228
Look at home, 216, 294, 351, 370, 400, 503, 529
Lords, House of, 529, 202, 332
Loss of the "Birkenhead," 397
Ludlow, Harvey, Esq., hospital reports, 466, 563, 619
Lunacy, 332
..... Act, the, 605
....., prosecution under the, 307
....., certificates of, 119
....., law of, 137
....., non-restraint in, 51
Lunatic asylum, a pauper, 280
....., Devon County, 125
..... Bloomerism, 151
..... asylums, county, superintendents of, 600, 642
....., private, 19
Lunatics, criminal, 113
....., pauper, 151
....., state asylums for criminal, 332
....., statistics of, 151
Lung, grangrene of the, 578
Lungs, acid in the, 270
..... and heart, diseases of the, 90
....., cancer of, 21

M

Macdonald, John D., Esq., R.N., remarks on the microscopic characters of the urine in Bright's disease of the kidney, 289
Madeira, a sketch of, 134
Magic, witchcraft, and animal magnetism, a history of, 217
Malformation, genital, 252
..... in the female, remarkable, 187
..... of semi-lunar valves, 197
..... the aortic valves, 95
..... female organs, 84, 136
Malignant tumour in the head, 128
Manchester charities, the, 644
Mankind, museum of, 26, 99
Manual of human physiology for students, &c. By John Morfold Cottle, 622
March of death in St. Giles, 73
Marischal College and University, Aberdeen, 456
Martyr, a, to science, 382
Marylebone, 407
Massey, Alfred, Esq., hospital reports, 242
Materni, nævi, 224
Maternity Charity, statistics of the Royal, 447
Matico in uterine hæmorrhage, 642
Mayo, Herbert, M.D., the philosophy of living, 413
Meat, unwholesome, 228
Meats preserved in vacuo, 151, 265
....., the preserved, of the Navy, 202
Mechanica, Medicina, 193
Mechanism of bronchophony, the, 460, 636
Mediastinum, cancer of the posterior, 197
Medical and Chirurgical Society, the Royal, 76, 124, 132, 140, 177, 228, 279, 407, 456, 577
....., reports, 94, 140, 218, 274, 302, 328, 378, 450, 503, 551, 601
..... Pathological Society, the Liverpool, reports, 353
..... scientific estimates, navy, 255
..... Surgical Association, the Provincial, 605
..... appointments and vacancies, 124, 149, 176, 202, 254, 280, 305, 331, 354, 381, 407, 431, 456, 507, 531, 554, 632
..... in the East India Company's service, 568
..... aspects of death, the, 91
..... Benevolent College, the, 25, 93, 177, 228, 280, 306, 396, 407, 456, 481, 507, 527, 581, 625
..... Fund, 48, 254, 531, 555
..... charities, 109, 632
" ..... Circular," the, 93
..... department, army, 125
..... diary and journal for 1852, 20
..... dictionary for the people, 498
..... Directory, the London and Provincial, 296
..... Dispensary, Oxford, 432
..... etiquette, 377
..... ethics, 45, 69, 196
..... fees and the Court of Aldermen, 280
..... by railway, 100
..... fellowships, Cambridge, 274
..... Fund, British, 125, 149, 377, 592
..... history of the 47th Regiment, 290
..... honours, 643
..... men in Parliament, 267, 322
....., mortality among, 505
....., society for relief of widows and orphans of, in London and its vicinity, 229
....., fees to, 339

MEDICAL NEWS :—
24, 50, 75, 98, 124, 149, 176, 201, 227, 254, 279, 305, 331, 354, 380, 406, 431, 445, 479, 506, 531, 554, 581, 604, 631, 643
..... nomenclature, 502
..... officers, gallant conduct of, 216
....., unpaid, 443, 444, 522
..... provident institutions, 378, 575, 597
..... reform, 89, 135, 177, 628
..... Bill, 191
..... science, progress of, 44, 144, 166, 193, 270, 374, 525
Medical Society, Colchester, 407
....., Liverpool, 98, 148, 201
..... of London, 250, 354, 432, 450, 555
....., reports, 22, 50, 73, 121, 147, 173, 198, 224, 252, 303, 351, 428, 476, 530, 553, 578, 629
....., Parisian, 246
....., Wakefield, 99
..... statistics, 190
..... witnesses, fees to, 605
Medication, on topical, 199
Medicina Mechanica, 193
Medicinal agents, therapeutic action of various, 427
Medicine and surgery, obstetric, 20
....., the London practice of, 15, 38, 65, 86, 108, 131, 188, 215, 242, 260, 291, 318, 369, 393, 415, 466, 521, 547, 563, 618
....., Parisian practice of, 263, 320, 416
....., provincial practice of, 17, 262, 369, 393, 415, 566, 620
....., improper, death from, 382
....., Liverpool School of, 407
....., Middlesex Hospital School of, 643
....., School of, 480
Medicines, examinations of the effects produced by certain, 362
..... for the Navy, 203
..... on the tongue, on placing, 73
Medico-Botanical Society, the Royal, 150
.....-Chirurgical Society, Edinburgh, 247
.....-Ethical Association, proposed, 164
Meetings, list of scientific, 18, 39, 67, 87, 109, 132, 162, 189, 216, 244, 263, 293, 321, 345, 370, 394, 418, 440, 467, 493, 522, 549, 567
Melanosis, 620
Members, scientific, for Parliament, 163
Memoir of the late Dr. Anthony Musgrave, 397
Men with tails, 229
Menses, retention of, 353
Menstrual period, the, 98
Menstruation, on the final cause of, 57, 92, 115, 138, 171, 219, 299, 325
Mental physiology, chapters on, 595
Merchant shipping, drugs for the, 229
Mercury, 174
..... in syphilis, 62
Mesmerism, Dr. Davey and, 87
..... in Edinburgh, 246
Metalbumen, 193
Metastasis, 579
Meteorology, 99
Method, new, of treating gonorrhœa, 365
Metropolis, supply of water to the, 66, 163, 345
Metropolitan Albert Park, New, 332
..... Free Hospital, 480, 581
....., statistics of 281
..... Interments Bill, 51, 76, 555
Microscope, on the use of the, 192
Microscopic characters of the urine in Bright's disease of the kidney, 289
Microscopical Society, the, 25, 99
Middlesex Hospital, the practice of medicine and surgery at, 108, 415
..... School of Medicine, 643
Midland Observatory, the, 51
Midwifery, the new Board of, 622
Military appointments, 25, 50, 75, 125, 149, 176, 202, 254, 279, 305, 331, 354, 380, 407, 431, 456, 507, 532, 555, 580, 631
..... order of the bath, 590
Militia, the, 532
..... Act, the proposed, 191
..... appointments, 407, 507, 604
..... Bill, the, 581
Milk after weaning, 374
Millah emigrant ship, small-pox in the, 255
Milton, J. L., Esq., hospital reports, 260, 393, 521, 618
....., on a new method of treating gonorrhœa, 365
..... spermatorrhœa, 241
Minter, Surgeon, 643
Mirror of dentistry, 218
Monomania, homicidal, 270
Monument to Jenner, 140, 172
Morehead, C., M.D., notes on Bright's disease of the kidney, etc., 297
Morpeth Board of Guardians, 481
Mortality among medical men, 505
..... and sickness of troops at Bombay, 506
..... at public institutions, statistics of, 300, 325, 351
.. .., infantile, 76
..... in hospitals, asylums, and workhouses of London for 1851, statistics of, 229
..... notabilia, 204, 307, 481, 508, 532, 581
....., statistics of annual, for 1851, 77
..... table, 26, 52, 78, 100, 126, 151, 178, 204, 230, 256, 280, 307, 333, 356, 382, 408, 432, 482, 508, 532, 556, 581, 606, 632, 644
..... tables, Mr. B. Smith's, 172
Mountain ash, berries of the, 348
Movements of the heart, 428
Munich, the University of, 354
Murderers, the Irish, 151

Muscles, respiration of, 44
Muscular abnormity, 47
Museum of mankind, the, 26, 99
..... practical geology, 25
....., the Hunterian, 280
Museums, provincial, 99
Musgrave, memoir of the late Dr. Anthony, 397
M'William, J. O., M.D., F.R.S., R.N., observations on that portion of the "Second Report on Quarantine" by the General Board of Health, which relates to the yellow fever epidemy on board H.M.S. Eclair, and at Boa Vista, in the Cape de Verde Islands, 511, 540, 567, 572, 599

N

Nævi Materni, 224
Nævus of the eyelid, case of, 318
....., treatment of, 474, 527
National ingratitude, 507
Natural gas, 26, 51
Naval appointments, 50, 75, 99, 125, 149, 176, 202, 228, 254, 279, 305, 331, 407, 456, 480, 507, 580, 604, 631, 632, 643
..... assistant surgeons, the, 67, 89, 133, 164, 331, 396
..... news, 305
..... promotion, 228
Navy medical and scientific estimates, 255
....., medicines for the, 203
..... preserved meats, 202
..... victualling, 39
Neck of the humerus, fracture of, 247
Necropolis, the London, 556
....., the Victoria Pyramid, 99
Necrosis, 120, 521, 547
Nervous system, physiology of the, 45
Neucourt, M., on neuralgia of the brachial plexus, 45
Neuralgia, 44
..... and sciatica, 85
..... of the brachial plexus, 45
....., traumatic, 392
Neuralgic amaurosis, 278
New application of galvanism, 407
..... Board of Midwifery, 622
..... Charter of the College of Physicians, 419, 643
..... councillors, 631, 643
..... inventions and patents, 279
..... method of treating gonorrhœa, 365
..... Metropolitan Albert-park, 332
..... operation in tumour of the upper jaw, 391
..... Pharmacy Bill, the, 215, 349
..... Surgical Hospital, 246
..... test for sugar, 374
Newcastle-on-Tyne Infirmary, 566
..... Pathological Society, reports, 352
Newport, Geo., Esq., F.R.S., on the impregnation of the ovum in the amphibia, 20
News, medical, 24, 50, 75, 98, 124, 149, 176, 201, 227, 254, 279, 305, 334, 354, 380, 406, 431, 445, 479, 506, 531, 551, 581, 604, 631, 643
News, naval, 305
Nipple of the breast in women, retraction or depression of the, 349
Nitrate of silver to the eye, 618
..... urethra, mode of applying, 170, 196
Nomenclature, medical, 502
Non-restraint in lunacy, 51
.....-menstruation, 311
North Pancras Provident Dispensary, 150
..... Walsham, the inquest at, 589
Notabilia, mortality, 204, 307, 481, 508, 532, 581
Nottingham, 26
Novel treatment of aneurism, 255
Nunn, T. W., varicose veins and varicose ulcers, 497
Nurses, training institutions for, 40, 91

O

Obituary, 25, 50, 70, 99, 125, 176, 202, 228, 254, 331, 355, 381, 407, 432, 456, 506, 531, 555, 581, 604, 613
Observations in surgery, 497
..... on that portion of the "Second Report on Quarantine" by the General Board of Health, which relates to the yellow fever epidemy on board H. M. ship Eclair, and at Boa Vista, in the Cape de Verde Islands. By J. O. M'William, M.D., F.R.S., R.N., 511, 540, 567, 572, 599
..... the local treatment of ulcers of the leg, 129, 183, 315, 388
Observatory, the Midland, 51
Obstetric medicine and surgery. By F. H. Ramsbotham, M.D., 20
Obstruction, intestinal, 249, 250
..... of the pulmonary arteries, 161
Office of Coroner in Jamaica, 151
Officers, unpaid medical, 413, 414, 522
Oil, cod-liver, 426
Old chairs to sell, 347
..... houses in Edinburgh, 349
Oldham, Henry, M.D., on non-menstruation, 311
Operating, a new mode of, for ovarian dropsy, 630
Operation, the double flap, 86
Operations for ovarian dropsy, 530
..... retention of urine, 359, 384
....., surgical, for retention of urine, 450
Ophthalmia, prussic acid in, 247
....., pustular, 36
....., rheumatic, 428
Ophthalmic Hospital, Kent, 203
....., practice of medicine and surgery at, 620
..... practice, cases in, 159
Opium, consumption of, 281
Oran, cholera in, 264
Oration, the Hunterian, 177
..... delivered before the Medical Society of London, by Edwin Canton, F.R.C.S., 596
Order of the Bath, the military, 590
Organic union of contiguous teeth, 552

ORIGINAL COMMUNICATIONS:—
8, 31, 57, 83, 104, 127, 156, 183, 209, 231, 285, 311, 338, 362, 387, 434, 460, 487, 511, 539, 559, 585, 611, 633

ORIGINAL LECTURES:—
1, 27, 53, 79, 101, 153, 179, 205, 231, 257, 283, 309, 335, 357, 383, 409, 433, 457, 483, 509, 533, 557, 583, 607
Originality, Mr. Syme's, 72
Ormerod, Ed. Latham, M.D., on the pathology of one form of encysted empyema, 637
Orthopædic Hospital, City, 25, 432
Ossification of the retina, 199
Our relations with the homœopaths, 18
..... future, 18
Outlines of physiology, anatomy, and surgery, 135
Ovarian dropsy, 630
....., operations for, 530
..... tumours, reports of practice illustrative of the diagnosis, treatment, and pathology of, 235
Ovaritis, sub-acute, 123
Ovary, cystic tumour of the, 146
Ovum, on the impregnation of the, in the amphibia, 20
Owen, Professor, 25, 50
Oxford Medical Dispensary, 432
..... University of, 24, 124, 150, 177, 228, 455, 554, 631, 643

P

Paget, Jas., Esq., testimonial to, 581
Palate, cleft, 433
Pancras, St., 255
Paracentesis thoracis,—pleurisy, effusion, 106
Paralbumen, 193
Paralysis of the bladder, 328
Paris Academy of Sciences, 124, 278, 506, 553
Parish of St. Anne, Soho, 76, 306
Parisian Medical Society, 246

PARISIAN PRACTICE OF MEDICINE AND SURGERY, the:—
263, 320, 416
Parkes, E. A., M.D., clinical lectures, 53, 237, 357
Parliament, medical men in, 267, 322
....., scientific Members for, 163
Parturition after death of the mother, 45
..... among the Esquimaux, 473
....., case of inversion of the uterus after, 378
Pascoe, Mr., case of, 418, 421, 444, 481, 589
Pasquier, M., 99
....., Baron A., 51
Patent agency, 556
Patents, new inventions and, 279
Pathological Society of Dublin, 135
Pathological Society of London, 99, 202, 254, 305, 381
....., anniversary meeting, 49
..... reports, 21, 43, 95, 120, 146, 172, 197, 250, 451, 581
..... anatomy, 50
..... Newcastle, reports, 352
Pathology and diagnosis of renal diseases, lectures on the, 283, 335, 409, 533
..... of the uterus, 140
..... of one form of encysted empyema, 637
Pauper lunatics, 151
..... Lunatic Asylum, 280
Pavy, F. W., Esq., hospital reports, 15, 263, 416
Peace, home truths for home, 399
Pennell and Leslie, Drs., case of artificial anus, 364
People, Medical Dictionary for the, 498
Perforating ulcer in the stomach, 176
Perforation of the intestine, 455
..... stomach, 530
Perineal section, 258
Period, the menstrual, 98
Peritonitis, suppurative, 251
Petersburg, St., 51
Pharmaceutical chemists, 189
Pharmacopœia, Conspectus of the British, 135
..... of the Royal College of Physicians of London, translation of the, 297
Pharmacy Bill, the, 273, 295, 332, 347, 376, 442, 481
..... new, 215, 349
Phillips, Richard, F.R.S., translation of the Pharmacopœia of the Royal College of Physicians of London, 297
Philomathic Society of Paris, 273
Philosophical Institution, Birmingham, 99
Philosophy of living, the, 443
Philp, Hill v., 150
Phthisis, etiology of, 186, 237
Physic, cheap, 324
Physicians, the Royal College of, 346, 380, 441, 554, 604
....., the new charter of the College of, 419, 449, 475, 528, 529, 578, 643
Physiological chemistry, 42, 69
..... researches, 134
Physiology, annals of anatomy and, 525
....., anatomy, and surgery, 135
....., chapters on mental, 595
....., human, 622
..... of the nervous system, 45
Pile, the voltaic, 245
Pirrie, William, F.R.S.E., the principles and practice of surgery, 373
Plea of insanity, the, 113, 191
Pleurisy, effusion, paracentesis thoracis, 106
Pneumonia, on the occurrence of expansion of the chest in the course of, 338
....., treatment of, 483
Poisoning, alleged case of, 71
..... by arsenic, 93
..... cannabis indica, 137
..... cantharides, 255
..... Godfrey's cordial, 203
..... laudanum, 432
Poisons, on the elimination of certain, 279
Polypi of the ear, on the treatment of, 14, 105, 212, 343
Polypus, large, of the uterus, removed by ligature, 243
Polytechnic Institution, 25
Poor-law unions, 217
Popliteal aneurism, 352
Populine, 176
Practical cases, 83
..... observations on diseases of the ear, 313, 437, 487
Practice of medicine and surgery, the London, 15, 38, 65, 86, 108, 131, 188, 215, 242, 260, 291, 318, 369, 393, 415, 466, 521, 547, 563, 618
....., Parisian, 263, 320, 416
....., Provincial, 17, 262, 369, 393, 415, 566, 620
..... surgery, the principles and, 373
Practitioners, country, and the horse-tax, 223
Presentation, breech, 127
Preservation of pathological specimens, 429
..... vegetables, 399
Preserved meats, the, 151
..... navy, 202
Pressure, aneurism treated by, 566
Principles, the, and practice of surgery, 373
Private lunatic asylums, 19
Prize essay on the descriptive anatomy of the abdominal viscera of the horse, 297
....., the Jacksonian, 98, 420
Prizes, the "Hope," 125
Progress of Epidemics, 76, 280, 307, 332, 381, 432, 532, 556, 605

PROGRESS OF MEDICAL SCIENCE:—
44, 114, 166, 193, 270, 374, 525
Prolonged gestation, 223
Promotion, naval, 228
Propagation of yellow fever by contagion, 640
Proposed Hospital for Incurables, 119
..... Militia Act, 191
..... Reform Bill, the, 110
Prosecution by the Society of Apothecaries, 228
..... under the Lunacy Act, 307
Prostate gland, diseases of the bladder and, 267
Provident Dispensary, North Pancras, 150
..... Institutions, Medical, 378, 578, 597

PROVINCIAL AND FOREIGN CORRESPONDENCE:—
20, 70, 135, 167, 246, 271, 298, 324, 348, 399, 121, 473, 526, 550, 623
Provincial Medical and Surgical Association, 605
....., Medical Directory, London and, 296
..... museums, 99

PROVINCIAL PRACTICE OF MEDICINE AND SURGERY, the:—
17, 262, 369, 393, 415, 566, 620
Proxy, the vote by, 63, 99
Pruritus, 525
Prussia, 99, 125
....., dead-houses in, 333
Prussic acid in ophthalmia, 247
Psora, treatment of, 598
Psychidæ, the, 175
Public baths and washhouses, 51, 151
Public records, the, 99
Pulmonary arteries, obstruction of the, 161
..... emphysema, 400
Pupil, artificial, observations on, 11, 33
Purulent infection of the blood, 401
Pustular ophthalmia, 36

Q.

Quackery, 632
Quacks and their advertisements, 51
Quadruple birth, 333
Quain, R., Esq., F.R.S., clinical lectures on surgery, 28, 79, 153
....., on some difficulties occurring in a case of lithotomy, 58
Quarrel, the latest Edinburgh, 493, 527
Quassia, aloes, and foreign hops, 407
Queen's College, Birmingham, 99, 407
..... Hospital, Birmingham, 507
..... University in Ireland, 306, 550
Quekett, John, a practical treatise on the use of the microscope, &c., 192
..... lectures on histology, 623
Question, the speculum, 196, 295
Quinine in typhus, 473

R

Railway, medical fees by, 100
....., submarine, 100
Ramsbotham, Dr., 320
....., Francis H., M.D., on the final cause of menstruation, 57, 92, 115, 138, 171, 219, 299
....., F. H., M.D., the principles and practice of obstetric medicine and surgery, 20
Receipt-book, the druggist's general, 270
Records, the public, 99
Recovery after fracture of the base of the skull, cases of, 238
Rectum, diseases of the, 28, 79, 153
....., scirrhus of the, 248
Reform Bill, the New Medical, 191
....., the proposed, 110
....., medical, 89, 135, 177, 628
Regiment, 47th, medical history of the, 290
Regulations, East India Company's, 68
Reid, life of Dr. John, 420
Relations, our, with the homœopaths, 18, 111
Relief of Widows and Orphans of Medical Men in London and its vicinity, Society for, 229
Remarkable case of gestation, 104, 298
..... malformation in the female, 187
Remarks on calculi, 272
..... on the climate and the principal diseases of Belgium, 324
Renal diseases, lectures on the pathology and diagnosis of, 283, 335, 409, 533
Reports of practice illustrative of the diagnosis, treatment, and pathology of ovarian tumours, 235

REPORTS OF SOCIETIES:—

21, 48, 73, 94, 120, 140, 172, 197, 224, 248, 274, 302, 328, 351, 378, 423, 450, 476, 503, 530, 551, 578, 601, 629

Ashmolean Society:—
Liebig's method of determining the amount of urea in urine, 226

Chemical Society:—
On a new method of estimating the quantity of the urea in urine, 97
Hippuric acid; populine, 176
Variation of potash and soda in certain samples of barley; compounds of cotton with the alkalies, 278
Contributions towards the history of tannic acid; on the detection and qualitative separation of tin, antimony, and arsenic, 603

Entomological Society:—
Remarks on the psychidæ, 175

Epidemiological Society:—
Appointments of foreign and colonial secretaries, 477
On the introduction into and progress of vaccination in Bengal, 630

Ethnological Society:—
On the Ethnography of Akkrah and Adampe, West Africa, 227

Liverpool Medical Society:—
Malignant disease of the uterus; uterus and appendages during a menstrual period, 98
Case of tubercular disease; cavities in lung showing a healing tendency, 148
Some observations on subcutaneous cysts, and the best mode of removing them, 201

Liverpool Medical and Pathological Society:—
Three cases of asphyxia from the inhalation of impure air; case of retention of menses from imperforate hymen, 353

Medical Society of London:—
External division of stricture of the urethra, 22
Galvanic battery and belt; calcification of fibrous tumour of the uterus; on the endosmotic action of medicines, 23
Encephaloid disease of the kidney; M. Junod's exhausting or hæmospasic apparatus, 50
On placing medicines on the tongue; ulcer of the stomach; extensive wound of the throat; death—on excision of joints, 73.
Fibrinous concretion in the aorta; fatty degeneration of the heart; the liver and its secretions; the arcus senilis and fatty degeneration of the heart; clinical illustrations of sub-acute ovaritis, with remarks on the diagnosis of that disease, 121
Portraits of Fothergill and Lettsom; yellow fever in Rio de Janeiro: on injuries to the spine, and their relation to the urinary organs, etc., 147
Discoloration of the hair after ringworm of the scalp; twist and adhesion of the umbilical cord; peculiar influence of mercury at the present time; the utility of copious bloodletting in cases of congestion and inflammation, 173
Five calculi removed by lithotomy, each containing a field bean for its nucleus; the coexistence of variola and vaccinia in an infant six months old; coiling of the cord; ossification of the retina, lens, and cornea; on topical medication in the treatment of diseases of the pharyngo-laryngeal membrane, 198
Dr. Ogier Ward's single-tubed feeding bottle; case of epispadias; nævi materni; their structure, peculiarities, and treatment, 224
Coincidence of vaccinia and variola; *serres-fines* in superficial rupture of the perinæum; genital malformation; foreign body in the larynx; the cause and prevention of death from chloroform, 252
On idiocy: its causes and treatment, 303
On the morbid conditions of the kidney giving rise to albuminuria, 351
A peculiar symptom of rheumatic ophthalmia; preservation of pathological specimens; on fatty degeneration, 428
Diseases of heart; general enlargement; old pericardical adhesions; dilatation of all the cardiac cavities and vessels; fibrinous deposits; perforating ulcer in the stomach, 476
Operations for ovarian dropsy; ligature of the external iliac artery; perforation of the stomach; on the nature and treatment of epilepsy, 530
Apparatus for the reduction of dislocations, 553
Case of gangrene of the lung; a new mode of applying topical medication to the larynx; what is metastasis? 578
Small-pox after vaccination; bony tumour of the uterus; ulceration of the appendix vermiformis, and obstruction of the bowels; on spinal curvature or scoliosis; on a new mode of operating for ovarian dropsy, 629

Newcastle Pathological Society:—
Case of popliteal aneurism cured by compression; cancer of the stomach encroaching on the lower portion of the œsophagus; Bright's disease; case of femoral hernia, 352

Paris Academy of Sciences:—
Comparative statistics of deaths from cholera in France in 1832 and 1849; researches on the presence of iodine in nature, and its effect on the goitre; on the employment of chloroform; on the employment of sulphate of zinc as an antiseptic, 124
On neuralgic amaurosis, 278
On the influence of the grand sympathetic nervous system on animal heat, 506
On the relative proportions of nutriment in various kinds of animal food, 553

Pathological Society of London:—
Cancer of the lungs, pleura, pericardium, bronchial, and other glands, 21
Specimens of the guinea worm; dysentery with extensive sloughing and ulceration of the large intestines, 22
Fatty degeneration of the heart, causing death by rupture, 48
A portion of the rectum which, having protruded, had been cut off; Anniversary Meeting, 49
Dr. Bence Jones's case of serous cysts of the kidneys; malformation of the aortic semilunar valves; rupture of the heart, consequent on fatty degeneration, and associated with softening of the brain; aneurism of the aorta; with a description of the morbid anatomy of the recurrent nerve compressed by it, 95
Crimson or hæmatoid crystals (of Virchow), and calcification of the minute arteries of the cerebrum; necrosis of a portion of the head and neck of the thigh-bone; extensive laceration of the liver, which the patient survived seven weeks, 120
Hydatid abscess of the liver, opening into the right pleural cavity—great enlargement of the head, occasioned by a morbid growth from the cranial bones, 172
General softening of the brain, with abscess in the left cerebral hemisphere, in connexion with caries of the temporal bone; an example of a single kidney being found in the body; malformation of the pulmonary semilunar valves; cancer of the posterior mediastinum; two specimens of cystic oxide calculi, 197
Cholesteatomatous and cystic tumour of the ovary, 146
Ulcerated cancerous tumour of the right anterior arch of the fauces; hypertrophy of the spleen; crystals in substance of spleen (splenic murmur); ulceration of colon; suppurative peritonitis, causing perforation of the intestine and of the abdominal parietes, 250
Red and white softening of the right hemisphere of the brain; perforation of the intestine in a case of typhoid fever, 454

Philomathic Society of Paris:—
On goitre and cretinism, 278

Royal Medical and Chirurgical Society:—
Remarkable case of foreign bodies in the stomach and duodenum, complete obstruction of the bowels, and mechanical displacement of organs; aneurism by anastomosis in the orbit; ligature of the common carotid artery, 94
An abstract of five hundred and eighty-three *post-mortem* examinations of the uterine organs, 140
Case of scirrhus of the rectum; cases of intestinal obstruction, 248
Anniversary Address by the President, 274
Case of stricture of the colon, successfully treated by operation after thirty days' obstruction, 302
Vaccination tested by the experience of half a century, 328
Case of inversion of the uterus after parturition, proving fatal in eighteen months, 378
A few remarks on the surgical operations usually adopted for retention of urine, 450
On fibrinous deposits on the lining membrane of veins; remarks on hydrophobia, 503
A case of hæmorrhage from inversion of the uterus; on the occasional organic union of contiguous teeth, 551
On some of the principal effects resulting from the detachment of fibrinous deposits from the interior of the heart, and their mixture with the circulating blood, 601

Statistical Society of London:
Mortality among medical men; sickness and mortality of the troops (European and native), under the Government of Bombay, 505

Researches, physiological, 134
Resection of bone, 8
Respiration, lectures on digestion, secretion, and, 5, 101, 309
..... of muscles, 44
Retention of menses, 353
..... urine, operations for, 359, 384, 450
Retina, ossification of the, 199
Retinitis, acute, 359
Retraction or depression of the nipple of the breast in women, 349

REVIEWS:—

20, 42, 69, 90, 113, 134, 164, 192, 217, 267, 296, 323, 373, 398, 419, 443, 471, 497, 524, 570, 595, 622

The Principles and Practice of Obstetric Medicine and Surgery, in Reference to the Process of Parturition. By F. H. Ramsbotham, M.D., 20
On the Impregnation of the Ovum in the Amphibia. By Geo. Newport, F.R.S., 20
On the Nature and Treatment of Softening of the Brain. By Richard Rowland, M.D., 20
Medical Diary and Journal for 1852, 20
Physiological Chemistry. By Professor C. G. Lehmann. Vol. I. Translated from the Second Edition by George E. Day, M.D., F.R.S., etc., 42
Neuralgia; its various Forms, Pathology, and Treatment. Being the Jacksonian Prize Essay of the Royal College of Surgeons for 1850, with some Additions. By C. Toogood Downing, M.D., M.R.C.S., 44
Lectures on the Physical Diagnosis of the Lungs and Heart. By Herbert Davies, M.D., F.R.C.P., etc., 90
The Medical Aspects of Death, and the Medical Aspects of the Human Mind. By James Bower Harrison, M.R.C.S.L., etc., 91
On the Classification and Management of Criminal Lunatics. By J. C. Bucknill, M.B., London, 113
Remarks on the Plea of Insanity, and on the Management of Criminal Lunatics. By William Wood, M.D., etc., 113
Sketch of Madeira; containing Information for the Traveller, or Invalid Visiter. By Ewd. Vernon Harcourt, Esq., 134
Physiological Researches. By Sir Benjamin C. Brodie, D.C.L., F.R.S., etc., 134
Lectures on the Diseases of Infancy and Childhood. By Charles West, M.D., F.R.C.P., etc., 135
Thomson's Conspectus of the British Pharmacopœias. Edited by E. Lloyd Birkett, M.D., Cantab., 135

Outlines of Physiology, Anatomy, and Surgery. By William Wilkinson, Surgeon, 135
Die Bright'sche Nierenkrankheit und deren Behandlung: eine Monographie. Von Dr. Fried. Theod. Frerichs. Bright's Kidney Disease and its Treatment. By Dr. F. T. Frerichs, 164
The Descriptive and Surgical Anatomy of the Arteries, and Relative Anatomy of the Veins and Nerves of the Human Body. By J. H. Corbett, M.D., 166
A Practical Treatise on the Use of the Microscope. By John Quekett, 192
Medicina Mechanica, etc. By J. W. T. Blundell, M.D., 193
A History of Magic, Witchcraft, and Animal Magnetism. By J. C. Colquhoun, Esq., 217
Household Chemistry: or, Rudiments of the Science applied to Every-day Life. By A. J. Bernays, F.C.S., 218
The Mirror of Dentistry; a Review of the Present State of the Dental Profession; with full Information as to the Various Operations in Dentistry, the Use and Abuse of Artificial Teeth, etc. etc. By J. W. Davenport, 218
On the Diseases of the Bladder and Prostate Gland. By W. Coulson, 267
Sketches of Brazil. By R. Dundas, M.D., 269
The Druggists' General Receipt-book. By H. Beasley, 270.
London and Provincial Medical Directory, 296
Medical Directory for Scotland, 296
Medical Directory for Ireland, 296
Researches and Observations on Scrofulous Disease of the External Lymphatic Glands, etc. By Thomas Balman, M.D., M.R.C.S., 296
The Stomach and its Difficulties. By Sir James Eyre, M.D., Edin., 297
Notes on Bright's Disease of the Kidney, as Observed Chiefly in the Clinical Ward of the Jamsetjee Jejeebhoy Hospital at Bombay. By C. Morehead, M.D., 292
Prize Essay on the Descriptive Anatomy of the Abdominal Viscera of the Horse. By Mr. Jn. Gamgee, 297
Adventitious Products in the Choroid Plexuses of the Horse. By Mr. John Gamgee, 297
Translation of the Pharmacopœia of the Royal College of Physicians of London. 1851. By R. Phillips, F.R.S., 297
On the Fallacies of Homœopathy and the Imperfect Statistical Inquiries on which the Results of that Practice are Estimated. By C. H. F. Routh, M.D., 323
Hydropathy as Applied to Acute Disease. By T. R. Armitage, M.B., 323
Remarks on the Climate and the Principal Diseases of Belgium. By J. M. Coley, M.D., 324
The Principles and Practice of Surgery. By W. Pirrie, F.R.S.E., 373
On the Nature and Treatment of the Diseases of the Heart, etc. By James Wardrop, M.D., 398
Home Truths for Home Peace; or, "Muddle" Defeated, etc., 399
On Syphilis, Constitutional and Hereditary; and on Syphilitic Eruptions. By Erasmus Wilson, F.R.S., 419
Life of Dr. John Reid, late Chandos Professor of Anatomy and Medicine in the University of St. Andrews. By George Wilson, M.D., 420
The Past and Present State of Intramural Burying-places; with Practical Suggestions for the Establishment of National Extramural Cemeteries. By G. A. Walker, Surgeon, 443
The Hand; its Mechanism and Vital Endowments, as Evincing Design. By Sir Charles Bell, 443
The Philosophy of Living. By Herbert Mayo, M.D., 443
The Vegetation of Europe; its Conditions and Causes. By Arthur Henfrey, F.L.S., 443
A Treatise on the Diseases of the Chest; being a Course of Lectures delivered at the New York Hospital. By John A. Swett M.D., 443
Researches into the Pathology and Treatment of Deformities in the Human Body. By John Bishop, F.R.C.S., 471
Lateral Curvature of the Spine; its Causes, Nature, and Treatment. By R. W. Tamplin, F.R.C.S. Eng., 471
Observations in Surgery. By Benjamin Travers, jun., F.R.C.S., 497
Varicose Veins and Varicose Ulcers. By T. W. Nunn, 497
Medical Dictionary for the People. By Spencer Thomson, M.D., etc., 498
Homœopathy and the Homœopaths. By J. Stevenson Bushnan, M.D., 524
Homœopathy Unveiled, etc. By W. P. Brodribb, M.R.C.S. Eng., 524
Climate of Italy in Relation to Pulmonary Consumption; with Remarks on the Influence of Foreign Climates upon Invalids. By T. H. Burgess, M.D., 525
Annals of Anatomy and Physiology. Conducted by John Goodsir, F.R.C.S., 525
On Diseases of the Liver. By George Budd, M.D., F.R.S., 570
Chapters on Mental Physiology. By Henry Holland, M.D., F.R.S., 595
The Oration delivered March 8, 1852, before the Medical Society of London at the Seventy-ninth Anniversary. By Edwin Canton, P.R.C.S., 596
Manual of Human Physiology for Students; being a Condensation of the Subject, a Conservation of the Matter, and a Record of Facts and Principles up to the Present Day. By J. M. Cottle, L.R.C.P., etc, 622
The London Dispensatory: a Practical Synopsis of Materia Medica, Pharmacy, and Therapeutics. By the late A. T. Thompson, M.D., F.L.S., etc., 623
Lectures on Histology. By John Quekett, 623

Rheumatic and scrofulous inflammation of joints, 583
..... ophthalmia, 428
Rheumatism, 416
Rhine, calculus of the bladder on the banks of the, 449
Rigby, Edward, M.D., on dysmenorrhœa, 127, 285, 539
Ringworm, 173
Robinson, Fred., M.D., malignant tumour in the head, 128
Rotherham trial, the, 348
Routh, C. H. F., M.D., on the fallacies of homœopathy, 323
Rowe, Dr. G. Robert, 531
Royal Academy, the, 25, 50, 202
..... Asiatic Society, 25
..... Berkshire Hospital, 262
....., the practice of medicine and surgery at, 17, 262
..... Dispensary for Diseases of the Ear, 150
..... College of Physicians, 380, 554, 604
..... Surgeons, 50, 75, 98, 124, 176, 201, 254, 279, 305, 351, 380, 406, 431, 456, 479, 531, 554, 604, 631, 643
....., Bye-laws of the, 570
....., Ireland, 306
..... Institution, 604
..... Medical and Chirurgical Society, 124, 132, 140, 177, 228, 279, 407, 456, 577
..... Reports, 91, 140, 248, 274, 302, 328, 378, 450, 503, 551, 601
..... Society, Edinburgh, 349
..... Medico-Botanical Society, 150
..... Polytechnic Institution, 25
Rupture of the heart, 95
Ruptured urethra, 415

S.

Sale of Arsenic Act, 333
Salt in intermittent fever, 194
Sanitary, 51
Saunders, Geo., Esq., medical history of the 47th Regiment, 290
Scalp, cyst on the, 528
..... wounds, the treatment of, 129, 222
Scarlet fever, 151, 632
Sciatica and neuralgia, 85
School, King's College Medical, 507
..... London Hospital Medical, 507
..... of Anatomy and Medicine, St. George's Hospital, 507
..... Medicine, 480
..... Liverpool, 407
..... Middlesex Hospital, 643
Science, a martyr to, 382
..... and the franchise, 189
....., medical, progress of, 44, 111, 165, 193, 270, 374, 525
Sciences, Paris, Academy of, 124, 278, 399, 506, 553
Scientific meetings, list of, 18, 39, 67, 87, 109, 132, 162, 189, 216, 244, 264, 293, 321, 345, 370, 394, 418, 440, 467, 493, 522, 549, 567
..... Members for Parliament, 163
Scirrhus of the rectum, 218
Scoliosis, 629
Scorbutus, 193
Scotland, 20
....., correspondence from, 20, 70, 245, 271, 349, 400, 473, 526, 623
Scottish Universities, tests in the, 202
Scriven, J. B., Esq., correspondence from India, 167
Scrofulous disease, 296
..... an l rheumatic inflammation of joints, 583
Scull, cases of recovery after fracture of the base of the, 258
Seaman's Hospital Society, 76
Sea-salt in intermittents, 374
Secondary deposits, 565
..... syphilis, on the contagion of, 114
Secretion, lectures on digestion, respiration, and, 5, 101, 309
Secretions, the liver and its, 121
Section, perineal, 258
Selections from Journals, 41, 114, 166, 193, 270, 525
Semilunar valves, malformation of the, 197
Sepulture Bill, the Extramural, 371
....., extramural, 599
Serous cysts of the kidneys, 95
Serres-fines, 252
Severe injury to the head, 151
Sewers, 306
Sexual organs, malformation of the female, 81
Ship fever, 356
....., the Birkenhead troop, 372
Shipping, drugs for the merchant, 229
Ships, ventilation of emigrant, 255
Shoulder-joint, amputation at the, 619
Sibley, S. W., Esq., hospital reports, 108, 415
Sick children, hospital for, 177, 507, 523
" ....., the souls of the," 418
Siebold, on the psychidæ, 175
Silver, nitrate of, to the eye, 618
Simaba cedron and its preparations in gout, 364
Simon, John, Esq., F.R.S., lectures in clinical surgery, 205, 359, 384
Single kidney, a, 197
Sketch of Madeira, a, 134
Sketches of Brazil, 269
Skin, gutta percha in diseases of the, 598
Skoda's theory of consonance, 575, 642
Small-pox after vaccination, 629
..... in the Arethusa, 230
..... Millah emigrant ship, 255
Smith, Edward, M.D., LL.B., B.A., remarks on the etiology of phthisis, 186, 237
....., Henry, Esq., cases in surgery, 391
....., hospital reports, 65, 215, 261
....., successful case of ligature of the external iliac and superficial femoral artery, 465, 530
Smith's, Mr. B., mortality tables, 172
....., Mr. B., statistics of annual mortality for 1851, 77
Société de Biologie, 99
Society of Apothecaries, prosecution by the, 228
....., the Ashmolean, 178, 226
....., Chemical, 278
....., reports, 97, 176, 603
....., Colchester Medical, 407
....., Edinburgh Medico-Chirurgical, 247
..... Royal Medical, 349
....., Entomological, 26
....., reports, 175
....., Epidemiological, 50, 150, 255, 407, 477, 481, 630
....., Ethnological, 76, 227
....., Geological, 25, 605
....., Liverpool Medical, 98, 148, 201
..... and Pathological, reports, 353
....., Medical and Chirurgical, 76, 132, 140, 177, 228, 407, 456, 577
....., reports, 94, 140, 248, 274, 302, 328, 378, 450, 503, 551, 601
..... of London, 280, 354, 432, 450, 555
....., reports, 22, 50, 73, 121, 147, 173, 198, 224, 252, 303, 351, 428, 476, 530, 553, 578, 629
....., Microscopical, 25, 99
....., Newcastle Pathological, reports, 352
....., Parisian Medical, 246
....., Pathological, Dublin, 135
..... of London, 99, 202, 305, 381
....., reports, 21 48, 95, 120, 146, 172, 197, 250, 454, 581
....., Philomathic, of Paris, 278
..... for Relief of Widows and Orphans of Medical Men in London and its Vicinity, 229, 432
....., Royal Asiatic, 25
....., the Royal Medico-Botanical, 150
....., Seaman's Hospital, 76
....., Statistical, 432, 505
....., Sunderland Medical, 50
....., the Sydenham, 481
....., Syro-Egyptian, 26
....., Wakefield Medical, 99
....., Western Medical and Surgical, 481
Societies, reports of, 21, 48, 73, 94, 120, 140, 172, 197, 224, 248, 274, 302, 328, 351, 378, 428, 450, 476, 503, 530, 551, 578, 601, 629
Soda water, 126
Softening of the brain, 197, 454
Soho, parish of St. Anne, 76, 306
Solitary Confinement, 76
Solomon, James Vose, Esq., cases and observations illustrating the therapeutic efficacy of diluted hydrocyanic acid as a topical application in certain affections of the eye, 185, 367, 139
" Souls of the sick, the," 418
Sound, the uterine, 327, 404, 448, 492, 641
....., or bougie, 209
....., on the uterine, 600
Spasm of Larynx, 376
Special hospitals, the vice of, 467
Speculum, the, 248
..... question, the, 196, 295
.... use of the, 301
Spermatorrhœa, 241
Spiculæ, iron, in the cornea, 428
Spinal Hospital, the, 355
Spine, curvature of the, 171
..... injuries to the, 147
Spirometer, the, 270
Spittal, death of Dr., 491

Spleen, hypertrophy of the, 250
Splenic fluid, the, 525
..... vein, the blood of the, 167, 193
Staffordshire General Infirmary, 643
St. Andrews, University of, 202, 280, 507
St. Bartholomew's Hospital, practice of medicine and surgery at, 188, 318, 563, 618
St. George's Hospital, 42, 50, 507, 555
....., Convalescent Fund of, 555
....., practice of medicine and surgery at, 38, 131, 565
St. Giles's, march of death in, 73
St. Mary's Hospital, 48, 604
....., the practice of medicine and surgery at, 188, 466, 619
St. Pancras, 255
St. Thomas's Hospital, 306, 605
....., the practice of medicine and surgery at, 260, 393, 521
Stanley, Ed., Esq., F.R.S., clinical lecture, 583
Starch in cutaneous diseases, 525
State asylums for criminal lunatics, 332
Statistical Society of London, 432, 505
Statistics, homœopathic hospital, 340
....., medical, 190
..... of annual mortality for 1851. By Mr. B. Smith, 77
..... gastrotomy, 72
..... lunatics, 151
..... mortality in hospitals, asylums, and workhouses of London for 1851, 229
..... at public institutions, 300, 325, 351
..... the Metropolitan Free Hospital, 281
..... Royal Maternity Charity, 447
Stedman, John B., Esq., pleurisy, effusion—paracentesis thoracis, 106
Stokes, C., Esq., remarks on an improved method of supporting artificial teeth, 107
Stomach, the, and its difficulties, 297
....., cancer of the, 353
....., foreign bodies in the, 94
....., perforating ulcer in the, 476
..... perforation of the, 530
....., ulcer of the, 73
Stone in the bladder, 17
Stramonium, effects of, 197
Strangulated femoral hernia, 262
Strangulation, suicide by, 624
Stricture inveterate, 384
..... of the colon, 802
..... urethra, 22
..... and perineal section, 258
Subacute ovaritis, 123
Subcutaneous cysts, 201
Submarine railway, 100
Succus entericus, the, 526
Sugar, new test for, 374
Suicide by strangulation, 624
Sulphuric acid in diarrhœa, 31, 92, 138, 375, 528
Sunderland Medical Society and homœopathy, 50
Superintendents of county lunatic asylums, 600, 642
Supply of water to the Metropolis, 345
Supporting artificial teeth, 107
Suppurative peritonitis, 251
Surgeon, charge against a union, 52
..... Minter, 643
Surgeons, bye-laws of the College of, 570
....., College of, Ireland, 306
....., new Charter of the College of, 441
....., the Royal College of, 50, 75, 98, 424, 176, 201, 254, 279, 305, 354, 380, 406, 431, 456, 479, 531, 554, 604, 631, 643
....., the union, 265
Surgery, anatomy, and physiology, 185
....., cases in, 391
....., chair of, 135
....., dental, 560
....., the London practice of medicine and, 15, 38, 65, 86, 108, 131, 188, 215, 242, 260, 291, 318, 369, 393, 415, 466, 521, 547, 563, 618
..... Parisian practice of medicine and, 263, 320, 416
..... Provincial practice of medicine and, 17, 262, 369, 393, 415, 566, 620
....., observations in, 497
....., obstetric medicine and, 20
....., practical cases in, 83
....., the principles and practice of, 373
Surgical and descriptive anatomy of the arteries, 166
..... hospital, new, 246
..... operations for retention of urine, 450
Swiney Professorship of Geology, 496
Swansea officer of health, 266
Swett, John A., M.D., a Treatise on Diseases of the Chest, etc., 443
Swing, new ball and socket, for fractures of the leg, 403, 428, 498, 597, 625
Sydenham Society, the, 481
Syme, Mr., 118
Syme's, Mr., originality, 72
Sympathetic nervous system, influence of the, on animal heat, 506
Syphilis, on, 419
..... the contagion of secondary, 114
Syphilis, mercury in, 62
Syro-Egyptian Society, 26

T.

Tables, Mortality, 26, 52, 78, 100, 126, 151, 178, 204, 230, 256, 280, 307, 333, 356, 382, 408, 432, 482, 508, 532, 556, 581, 606, 632, 644
....., Mr. B. Smith's, 172
Tails, men with, 229
Tale, an o'er true, 41
Tamplin, R. W., F.R.C.S., lateral curvature of the spine, etc., 471
Tanner, T. H., M.D., on the employment of urea as a diuretic, 464
Tannic acid, 603
Tax, the Income, 244, 496
Taylor, Robert, M.D., on iritis in an infant, 234
....., case of acute retinitis, with remarks, 559
Teeth, irregular, 560
....., mode of fixing artificial, 170
....., organic union of contiguous, 552
..... supporting artificial, 107
Test for sugar, new, 374
Testimonial to Dr. Conolly, 322, 381
....., the Grant, 321
..... to James Paget, Esq., 581
Tests in the Scottish universities, 202
....., university, 247
Tetanus, 108
....., traumatic, cannabis indica in, 450
Theory of consonance, Skoda's, 575, 642
Therapeutic action of various medicinal agents, 427
Thigh, amputation of the, 161
Thompson, J. B., M.D., on the simaba cedron, and its preparations in gout, 364
....., Anthony Todd, M.D., the London Dispensatory, 623
..... Samuel, M.D., treatment of scalp wounds, 129
....., Spencer M.D., Medical Dictionary for the People, 498
....., Dr. Wm., death of, 526
Thomson's Conspectus of the British Pharmacopœia, 135
Throat, erysipelatous affection of the, 557
....., extensive wound of the, 78
Tin, 603
Todd, R. B., M.D., F.R.S., clinical lectures, 1, 179, 483, 557
Toe-nails, ingrowing, 502
Topical medication, on, 199
Torquay, the home-Madeira at, 591
Toynbee, J., Esq., on the treatment of polypi of the ear, 14, 105, 212, 343
Tracheotomy, 65, 119, 521
Training Institutions for Nurses, 40, 91
Translation of the Pharmacopœia of the Royal College of Physicians of London, 297
Transportation of an apothecary, 395, 404
Traumatic neuralgia, 392
Travers, Benj., jun., observations in surgery, 497
Treatment of albuminuria, 38
..... aneurism, novel, 255
..... croup by warm vapour and emetics. By Wm. Budd, M.D., 611
..... epilepsy, 530
..... hydrocele, 383
..... nævus, 174, 527
..... pneumonia, 483
..... polypi of the ear, on the, 14, 105, 212, 343
..... psora, 598
..... scalp wounds, 129, 222
..... tropical dysentery, 167
..... ulcers of the leg, 129, 183, 315, 388
..... uterine diseases and their, 424
Trial, the Rotherham, 348
Trinity College, Dublin, 50, 135, 254
Troop ship, the "Birkenhead," 372
Troops, sickness and mortality of, at Bombay, 506
Tropical dysentery, 167
Tubercular disease, 148
Tumour, bony, of the uterus, 629
....., cancerous, 250
..... in the head, malignant, 128
..... of the chest, fungoid, 215
..... labium, fibrous, 242
..... ovary, cystic, 146
..... upper jaw, 391
..... uterus, 23, 270
Tumours, reports of practice illustrative of the diagnosis, treatment, and pathology of, 235
Turnbull, James, M.D., lectures on clinical medicine: case of aneurism of abdominal aorta, in a patient formerly cured of popliteal aneurism by pressure—remarks on diagnosis—treatment—case of tumour in epigastrium, with pulsation—case of cancer of kidney, lungs, etc.—post-mortem examination—remarks on microscopical appearances, 607
Twist and adhesion of the umbilical cord, 173
Typhoid fever, perforation of the intestine in a case of, 455
..... fevers, typhus and, 324
Typhus fever, dumbness after, 462
Typhus and typhoid fevers, 324
....., quinine in, 473

U

"Ulceration," 545
....., uterine, 218
Ulcer, carcinomatous, 27
....., perforating, in the stomach, 476
..... of the stomach, 73
Ulceration of the appendix vermiformis, 629
Ulcers of the leg, observations on the local treatment of, 129, 183, 315, 388
....., varicose, 497
Umbilical cord, twist and adhesion of the, 173
Unhealthy inflammation, 615
Union surgeon, charge against a, 52
..... surgeons, the, 265
Unions, Poor-law, 217
Unity of the laws which govern the exciting agents of epidemic, endemic, and infectious diseases, by John Grove, Esq, M.R.C.S., 47, 62
Universities, tests in the Scottish, 202
University College, 468, 480
..... and the University of London, 228
..... Hospital, 354
..... of Cambridge, 280, 305, 455, 604
..... Dublin, 554
..... Durham, 162
..... France, 280
..... Glasgow, 631
..... and King's College, graduates for M.D., 431
..... of London, University College and the, 228
....., 24, 217, 228, 266, 428, 478, 479, 554, 604
..... Munich, 354
..... Oxford, 24, 124, 150, 177, 228, 455, 554, 631, 643
....., Queen's, Ireland, 306, 550
..... St. Andrews, 202, 280, 507
..... tests, 247
Unpaid medical officers, 443, 444, 522
Unwholesome meat, 228
Urea as a diuretic, 464
..... in urine, 97
....., amount of, 226
Urethra, mode of applying nitrate of silver to the, 170, 196
....., ruptured, 415
....., stricture of the, 22
....., and perineal section, 258
Urine, albuminous, 166
....., amount of urea in, 226
..... lithates in, 47, 93,
....., microscopic characters of the, in Bright's disease of the kidney, 289
....., operations for retention of, 359, 384, 450
....., urea in, 97
Use and abuse of nitrate of silver drops to the eye, on the. By T. Wharton Jones, F.R.S., 618
..... of the microscope, on the, 102
..... speculum, 301
Uterine diseases, 545
..... and their treatment, 424
..... egesta, 377
..... hæmorrhage, matico in, 642
..... sound, the, 327, 404, 448, 499, 600, 641
..... or bougie, 209
..... ulceration, 218
Uterus, bony tumour of the, 629
..... disease of the, 98
....., hæmorrhage from inversion of the, 551
....., inversion of the, 378
....., pathology of, 110
....., tumour of the, 23, 270

V

Vacancies, medical appointments and, 124, 149, 176, 202, 254, 280, 305, 331, 354, 381, 407, 431, 456, 507, 531, 554, 632
Vaccination, 329, 630
..... in England, 375
....., small-pox after, 629
..... tested by the experience of half a century, 633
Vaccinia and variola, 252
Vacuo, meats preserved in, 265
Varicose ulcers, 497
..... veins and varicose ulcers, 497
Variola, vaccinia and, 252
..... the co-existence of, 198
Vegetables, disease in, 644
..... preservation of, 399
Vegetation of Europe, the, 443
Veins, varicose, 497
Ventilation of emigrant ships, 255
Vertebræ, dislocation of the cervical, 188
Vice of special hospitals, 467
Victoria Pyramid Necropolis, the, 99
Victualling, navy, 39
Vote by proxy, the, 68, 99
Voltaic pile, the, 245

W

Wadsworth v. Collins, 125

Wakefield Medical Society, 99
Wakley, Mr. Thomas, 25
Walker, G. A., the past and present state of intramural burying places, &c., 143
Walshe, W. H., M.D., on the mechanism of bronchophony, 460, 636
Walton, Haynes, Esq., on entropium, 515
Wansbrough, T.W., M.D., on fluid bronchocele, 105
War in Africa, the, 355
....., the Burmese, 581
Ward, Nath., Esq., hospital reports, 86, 319, 517
Wardrop, James, M.D., on the nature and treatment of the diseases of the heart, &c , 398
Warwick, W. R., Esq., case of severe injury to the head, not immediately fatal, 131
Washhouses, baths and, 26, 151
Water gas, 51
....., hill-top v. valley-bottom, 412, 476
....., soda, 126
..... supply to the Metropolis, 66, 163, 345
Weaning, milk after, 374
Weeping leg, the, 60
West, Charles, M.D., lectures on the diseases of infancy and childhood, 135
West Riding yeomanry cavalry, 251
Western Dispensary, 605
..... Medical and Surgical Society, 481
Wilde, W. R., Esq., practical observations on diseases of the ear, 313, 437, 487
Wilkinson, Wm., outlines of physiology, anatomy, and surgery, 135
Wilson, Erasmus, F.R.S., on syphilis, constitutional and hereditary; and on syphilitic eruptions, 419
....., Geo., M.D , life of Dr. John Reid, professor of anatomy and medicine in the University of St. Andrew's, 120
Witnesses, fees to medical, 605
Women, Hospital for, 125
Wood, W., M.D., remarks on the plea of insanity, and management of criminal lunatics, 113
Woolcott, John, Esq., hospital reports, 620
Worcester General Infirmary, 431
Worm, the Guinea, 22
Wound of the throat, extensive, 73
Wounds, treatment of scalp, 129, 222

Y

Yellow fever, 147, 511, 540, 567, 572, 599
..... in Demerara, 298
....., on the propagation of, by contagion, 640
Yeomanry appointment, 480
..... cavalry, West riding, 251
York County Hospital, the practice of medicine and surgery at, 369

Z

Zinc, chloride of, in fistula, 576
Zoology, 99

LIST OF ENGRAVINGS.

Illustrating operation in cancer of the lower lip, 4, 5
..... resection of the bone in disease of the radius, 9, 10, 11
..... new method of operating in certain cases of artificial pupil, 13, 14, 33, 34, 35
..... pustular ophthalmia, 36
..... double cystiform bronchocele or goitre, 37, 38
..... a case of lithotomy, 59
..... a case of malformation of the female sexual organs, 85
..... the double flap operation, 87
..... lecture on diabetes (*Diagrams*), 103
..... an improved method of supporting artificial teeth, 167
..... excision of the outer half of the clavicle, 188
Illustrating apparatus for preventing protrusion of the bone in amputation of the thigh, 162
..... an instrument for applying nitrate of silver in solution to the urethra, 171
..... cases of diseased bone, 214
..... re-union of fracture of the base of the skull, 239
..... Dr. Oldham's polypus canula, 244
..... A new ball and socket swing for fractures of the leg, 493
..... tumour of the auricle, 437, 438
..... chronic erysipelas of the auricle, 487
..... entropium, 516, 517
..... apparatus for the reduction of dislocations, 553
..... cases of irregular teeth, 560, 561, 562

END OF VOL. XXV.

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